SUMMER SESSION 1958

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The University Record Comprises:

The Reports of the President to the Board of Control, the Annual Catalog, the Schedules, the Bulletin of the Summer Session, and announcements of special courses of instruction.

These bulletins will be sent without charge to all persons who apply for them. The applicant should specifically state which bulletin or what information is desired. Address

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CALENDAR OF 1958 SUMMER SESSION

May 19, Monday	Last day for filing preliminary application for 1958 summer session.
June 12, Thursday	Placement Tests for entering students.
June 13, 14, 16, Friday Saturday, Monday	Registration according to appointments assigned on receipt of preliminary application.
June 17, Tuesday, 7 a.m.	Classes begin. All registration fees increased $5.00 for persons completing registration on or after this date.
June 18, Wednesday, 5 p.m.	Last time for completing registration for the summer session. No one will be permitted to start registration after 3 p.m. on this date. Last time for adding courses or changing sections.
June 23, Monday, 5 p.m.	Last time for submitting resignation for the summer session and receiving any refund of fees.
	Last time for graduate students to apply to Department of Foreign Languages for reading knowledge examination on July 12.
June 21, Saturday, 12 Noon	Last time for making application at the office of the Registrar for degree to be conferred at the end of the summer session.
July 4, Friday	Holiday. Classes suspended.
July 7, Monday, 4 p.m.	Last time for dropping courses without receiving a grade of E.
July 12, Saturday, 10-12 a.m.	Foreign language reading knowledge examination for graduate students, Room 18, Anderson Hall.
July 18, Friday	Last day for candidates for degrees to be conferred at end of the summer session to complete correspondence courses.

July 21, Monday, 4 p.m.	Last time for candidates for Master's and Doctor's degrees to be conferred at the end of the summer session to file theses with the Dean of the Graduate School.
August 5, Tuesday, 7 a.m.	Final examination period begins. First semester registration begins for students enrolled in the summer session.
August 7, Thursday, 4 p.m.	Grades for all candidates for degrees to be conferred at the end of the summer session are due in the Office of the Registrar.
August 8, Friday	Faculty meetings, at time announced by the Deans, to pass upon candidates for degrees.
August 9, Saturday, 12 Noon	All grades for the summer session due in the Office of the Registrar.
August 9, Saturday, 8 p.m.	Summer Commencement Convocation.

ADMISSIONS

PRELIMINARY APPLICATION

All persons planning to attend the 1958 Summer Session, whether or not they have previously attended the University, must file the preliminary application form to be considered. The preliminary application may be obtained by writing to Office of the Registrar. No applicant can be assured that his admission to the 1958 Summer Session will be considered unless the preliminary application has been received at the Office of the Registrar on or before Monday, May 19, 1958. Upon receipt of the preliminary application, the applicant will be notified of the additional information (if any) that must be submitted. This additional information must be in the Office of the Registrar on or before June 1, 1958.

GENERAL STATEMENT

The Admission Requirements have been arrived at after a very careful study of the experiences of thousands of students over a long period of years. In every case they are minimum requirements that have evolved from studies of student performance at the University of Florida. These studies have had as a primary objective the identification of factors that would indicate a reasonable chance for successful completion of University work.

The Board of University Examiners is the agency responsible for administering all admissions to the University and its various components.

Students who are planning to enter the University of Florida for the first time will be considered for admission as follows:

Freshmen (those who have never attended any college)

1. If the student is entering the University from high school and has not attended college, he will be considered for admission to the University College. (See Section I)

Undergraduate Transfer Students

2. If the student is transferring to the University from another college or university and is presenting less than 64 semester hours of acceptable college credit for advanced standing, he will be considered for admission to the University College. (See Section II)

3. If the student is transferring to the University from another college or university and is presenting 64 semester hours or more of acceptable college credit as advanced standing toward a baccalaureate degree, he will be considered for admission to the Upper Division school or college of his choice providing his record indicates the completion of college work approximately equivalent to the comprehensive courses offered by the University of Florida in the areas of the Social Sciences, the Physical Sciences, English, the Humanities and the Biological Sciences. (See Section III)

Graduate Students (candidates for Master's or Doctor's Degrees)

4. If the student wishes to pursue graduate studies and has been graduated from an accredited college or university, he will be considered for admission to the Graduate Division. (See Section IV)

Medical Students (See Section V)

Law Students (See Section VI)

ADMISSION TO THE UNIVERSITY COLLEGE

Section I Freshmen (Applicants who have never attended college)

A. Graduates of Florida High Schools:

1. Graduation from an accredited high school is required. No specific units are required but students expecting to apply for admission to the University are advised to emphasize in their high school programs the following subjects: English, social studies, mathematics, foreign languages and the natural sciences.

2. Minimum Standing on the Placement Tests of the Florida 12th Grade Testing Program. All applicants must take the placement tests before being admitted to the University. These are achievement tests in the fields of English, mathematics, social studies, and natural sciences. Attainments in these fields are possible without specific high school courses and are not guarranteed by the acquiring of certain high school units. Graduates of accredited Florida secondary schools who attain scores on the Florida State-Wide 12th Grade Testing Program tests which place them above the scores attained by the lowest 40% of the high school seniors of the state are academically eligible for admission. The University may re-test any applicant prior to admission to validate the scores attained in the State Program.

3. High school graduates who do not meet the above requirements may apply for special consideration. In each case the application will be considered on an individual basis, and any, or all, or any combination of the following types of evidence may be used in appraising the eligibility of the student for admission to the University: a personal interview, grades and rank in class, reference to the student's cumulative high school files, recommendation of the high school principal, and/or review of the results of tests already given or requested by the university admissions committee. After reviewing the evidence called for, the Board of University Examiners may grant or deny admission. In such cases the University will give considerable weight to results on such other tests as are recommended by the Board of Examiners.

4. Non-Florida students entering the University as first time freshmen must, in addition to meeting the requirements stated in 2, above, have graduated from an accredited high school with standing in the upper half of their graduating class. They must also present recommendations from the high school principal or school superintendent. Non-Florida applicants are urged to take the College Entrance Board Examinations, the results of which can be satisfactorily compared with the tests of the Florida Program so as to avoid the expense for coming to Gainesville to take the Florida Tests.

*Section II Transfer Students**

1. *Honorable Dismissal.* The student must be eligible to return to the institu-

tion last attended. Students who *for any reason* will not be allowed to return to the institution last attended cannot be considered for admission.

2. *Satisfactory record.* All transfer students must have made an average of C or higher on all work attempted at all institutions previously attended to be considered for admission.

3. Undergraduate transfer students shall be required to make a satisfactory score on a general ability test.

4. The University of Florida accepts on transfer only those courses completed at other institutions with grades of C or higher.

*The student who has matriculated at any college or university, regardless of the amount of time spent in attendance or credit earned, is regarded as a transfer student.

ADMISSION TO THE UPPER DIVISION

From the University College:

See elsewhere in this bulletin the various programs of the University College and the specific requirements listed under the curricula of the several colleges and schools.

Section III Transfer Students

1. *Honorable dismissal from the institutions previously attended.* An applicant for admission who for any reason is not eligible to return to the institution last attended cannot be considered for admission.

2. *An average of C or better.* The average grade for all work attempted at other institutions must be C or better. An average grade of C or better is required for graduation from the University of Florida, and one who has not maintained this average before coming to the University need not apply.

3. A minimum of 64 semester hours accepted as transfer credit (only those courses completed at other institutions with grades of C or higher) not more than four of which are in Military Science or Physical Education.

4. *Specific course requirements for the professional school of the applicant's choice.* The courses listed as required for admission to the Upper Division under the various curricula or acceptable substitutes must be offered as advanced standing to qualify the student for admission to the Upper Division. An applicant lacking some of these requirements may be permitted to enroll in the Upper Division and complete them without reducing the credits required in the Upper Division for a degree. In some cases the student may be required to enroll in the University College until these requirements are met.

5. Undergraduate transfer students shall be required to make a satisfactory score on a general ability test.

Section IV—ADMISSION TO THE GRADUATE DIVISION

(See also more detailed description in the section of the *Catalog* headed Graduate Division.)

Limitations of space and staff restrict the enrollment of graduate students. The records of applicants for graduate study are reviewed by the graduate selection committees of the various colleges and schools. In general no student will be considered for graduate study in any unit of the University who is a graduate of a non-accredited institution. Unqualified admission to the Graduate School for study toward all degrees except those in the College of Education and the College of Physical Education and Health is dependent upon presentation of an undergraduate record from an accredited college or curriculum with an average grade of "B" for the junior and senior years. All applicants are required to make a satisfactory score on the Graduate Record Examination before admission to the Graduate School can be granted.

Section V—ADMISSION TO THE COLLEGE OF MEDICINE

(Candidates for the M.D. degree are accepted for admission only in the Fall of each year. See also more detailed description in the section of the *Catalog* headed College of Medicine.)

Section VI—ADMISSION TO THE COLLEGE OF LAW

1. The beginning courses in Law are not offered in the Summer Session, hence students are not admitted in June unless they have completed satisfactorily at least one semester of work in an accredited law school.

2. A student wishing to transfer from another accredited law school who, at the time of beginning his study of law, qualified for admission to this College under the stated requirements for beginning students (other than the Law School Admission Test) and who has maintained a scholastic average of C or higher on all previous law school work undertaken, may apply for admission with advanced standing. Courses completed with a grade of C or higher in other accredited law schools will be accepted for credit up to but not exceeding a total of thirty hours.

3. Applicants for admission to the College of Law must have received a 4-year baccalaureate degree from a college or university of approved standing and a minimum score of 340 on the Law School Admission Test. If the Test is retaken a minimum score of 375 is required.

   Under existing legislation veterans who present honorable discharges which show not less than ninety consecutive days of active service in the U. S. Army, Air Force, Coast Guard, Navy or Marine Corps may enter after they have completed 94 hours of college work meeting the standards of the Association of American Law Schools. A veteran who has not received a degree must have made an average of C or higher in all work undertaken prior to entrance in the College of Law and a minimum score of 340 on the Law School Admission Test. If the Test is retaken a minimum score of 375 is required. For information on admissions to the College of

Law with advanced standing see the section of the catalog headed College of Law.

Section VII
ADMISSION REQUIREMENTS FOR SPECIAL STUDENTS

Special students may be admitted to the various schools and colleges of the Upper Division only by approval of the Board of University Examiners. Each case will be considered on an individual basis. Application for admission as a special student must include: (1) records of previous educational experience (high school or college transcripts); (2) a statement as to the type of studies to be pursued; (3) a brief statement of the reason or reasons for selecting a special program other than a regular one; (4) satisfactory evidence of ability to pursue these studies— for example, a student to enroll as a special student for some technical courses and who feels qualified to do so by reason of employment or other experience should submit a brief description of this experience; (5) satisfactory scores on such ability or achievement tests as may be prescribed in individual cases by the Board of Examiners.

Section VIII
UNCLASSIFIED STUDENTS

For the summer session only, the University of Florida provides a category for those persons who may wish to take college courses and:

a. transfer back to the institution they regularly attend in the winter session;

b. meet certain specific certification requirements;

Persons from the groups defined above may enroll as unclassified students provided there is evidence that they would meet admission requirements as regular students.

It is possible, if the student later files all necessary credentials and meets all the requirements for registration as a regular student, for credit earned during one term as an unclassified student to be counted toward a degree program at the University of Florida. Under no circumstances will credit for more than one term in an unclassified status be applied toward any degree conferred by the University. Thus, persons that have been registered as unclassified in a previous summer session should complete the requirements for admission as regular students before attending subsequent summer sessions if they anticipate completing work for a degree at the University of Florida.

Students entering the University after high school graduation and prior to college attendance at any other institution are never admitted as unclassified students and must qualify for admission as regular students as described above.

ADMISSION INFORMATION FOR VETERANS

In addition to the regular requirements for admission set forth in the preceding sections and the forms incident thereto required by the University of Florida, any veteran who expects to enroll under provisions of any of the various

federal laws governing education or rehabilitation training of veterans must be sure that he has cleared the necessary details with the Veterans Administration and has obtained the necessary documents from them.

For the most part, the benefits of Public Law 346 (the G. I. Bill of Rights) are not open to any who were not in training on July 25th, 1951 or who have interrupted training since that time. There are some circumstances under which these benefits are open to the veteran, but each case must be cleared in advance with the Veterans Administration.

The government benefits available under Public Laws 16 and 894 (Vocational Rehabilitation Acts) for veterans who received service connected disabilities are provided for only after review of each individual case by the Veterans Administration.

Many young men and women who have had active duty in the armed forces during the period which began with the Korean conflict are eligible for educational benefits under Public Law 550. Veterans in this group are urged to begin preliminary application with the Veterans Administration well in advance of the date they expect to enter the University. Under this law the veteran receives monthly payments which cover educational expenses (fees and books) as well as subsistence. As most of the fee and book expense must be paid at the beginning of the school term it is essential that the veteran be in a position to meet these expenses as they are due which will almost always be before any remittance has been received from the government. Veterans expecting to attend college under PL 550 are urged to familiarize themselves with the requirements and restrictions relative to the benefits of this act. Officials of the Veterans Administration should be consulted on any points not clear to the student or prospective student. It is especially important that the student understand the procedures that must be followed to obtain Veterans Administration approval of original choice or any change of educational objective.

All veterans who believe they are entitled to educational benefits are urged to contact the appropriate Veterans Administration office in order that the decision may be made in their individual case. Veterans who at the time of registration do not have the necessary papers showing clear entitlement to government benefits are required to pay their own fees. If the proper clearances are subsequently presented to the Office of the Registrar, authorization for refund of fees and expenses appropriate in the individual case will be issued.

EXPENSES

REGISTRATION FEES

	Three Week Term	*Eight Week Term*
Florida Students	$ 20.00	$ 45.00
Non-Florida Students	55.00	145.00
Florida and Non-Florida students enrolled for thesis only (not to exceed		

4 semester credit hours) (such students are not entitled to student activity or infirmary privileges)	20.00	20.00
Florida Students—Forest Ranger School	.00*	55.00
Non-Florida Students—Forest Ranger School	.00*	175.00

Fees for registration after the regular registration period are increased $5.00. There are no waivers of the increased fees for any reason.

*Not offered.

SPECIAL FEES

Graduation Fee—Bachelor's Degree	10.00
Graduation Fee—Master's, Specialist's, or Doctor's Degree	20.00
Applied Music Fee*	30.00
Practice Room Rental	5.00
Instrumental Rental	5.00

* Applied Music Courses are offered during the eight-week term only.

Graduate Record Examinations. The Aptitude Test of the Graduate Record Examination is required for admission to the Graduate School. A fee of $8.00 covers the cost of this examination. Students who take one of the Advanced Tests of the Graduate Record Examination in combination with the Aptitude Test pay a fee of $12.00. For further information see the Graduate School Section of the Catalog Issue.

Transcript Fee. A student is furnished a first copy of his record free (regardless of the amount of work completed). Subsequent copies are charged for at the rate of $1.00 each, except when the order is for more than one copy. There is a charge of $1.00 for the first copy and 25 cents for each additional copy on the same order. University transcripts may be obtained from the Registrar's Office.

Audit Fees. Persons may be permitted to audit courses with the written consent of the instructor in charge and with the approval of the dean of the college administering the course on payment of a fee of $20.00 per course.

Auditor's permits are obtained at the Office of the Registrar. Fees are paid in the Cashier's Office.

No grades are recorded for Auditors. No one is permitted to audit courses without payment of the fee.

DEPOSITS

Housing Reservation. Students wishing to apply for space in University housing facilities must forward to the Director of Housing a reservation deposit of $10.00 at the time such application is made.

Breakage Books. Any student registering for a course requiring locker and laboratory apparatus or special University equipment and supplies in any department is required to buy a breakage book. Breakage books cost $3.00 or $5.00 each as determined by the department and laboratory concerned. A refund will be allowed on any unused undetached coupons at the end of the year, when the student has checked in his apparatus to the satisfaction of the departments concerned. Breakage books are sold in the Cashier's Office.

Dissertation Deposit. A deposit of $50.00 is made to cover the cost of publishing the dissertation. See the Graduate School section of the Catalog for choices for publishing the dissertation which involve the disposition of this deposit.

REFUND OF FEES

A student who cancels his registration or whose registration is cancelled by official University action on or before the date scheduled for the first class meeting of the summer term will be entitled to a full refund of registration and course fees.

A student who withdraws or is suspended by University action after the first day of classes but on or before the date indicated in the University Calendar shall be refunded all registration and course fees less a fixed charge of $3.00 which is not refundable.

A student who withdraws or is suspended by University action after the date set for refund of all but $3.00 and on or before the date which marks the end of the first week in the summer term shall be refunded 50% of registration and course fees.

PERSONAL FUNDS OF STUDENTS

Adequate facilities are available to students on the campus in Room 1, Administration Building, to provide security for student funds. The students may withdraw these funds as needed upon request. A fee of $00.75 for the summer session is charged regardless of the number of transactions during the period. Ordinarily, students, are limited to a maximum balance of $750.00. The amount held for a student may be returned to him in one or more payments upon his request provided funds are not held against uncollected checks. A statement of funds is provided the student and must be presented for all transactions. Inquiries should be addressed to Cashier, University of Florida, Gainesville, Florida.

LIVING EXPENSES

Meals may be obtained on campus at reasonable cost. Cafeteria service is available at several campus locations operated by the Food Service Division of the University. Several restaurants and cafeterias are located adjacent to the campus. Lodging is available in University housing facilities, in private rooming houses off-campus, and in fraternity and sorority houses.

STUDENT LIFE—SERVICES, FACILITIES, ACTIVITIES, REGULATIONS

OFFICE OF THE DEAN OF STUDENT PERSONNEL

The Dean of Student Personnel coordinates the counseling and service activities which are available to aid the student in solving personal and educational

problems and to help him in selecting a balanced program of social and recreational activities.

OFFICE OF THE DEAN OF MEN

The Dean of Men, as a counselor to men students, is interested in the total life of the student, including his academic, financial, social, and recreation activities. In cooperation with the Dean of Women, his office serves as a clearing house for all non-classroom activities. The Dean of Men serves as an adviser to student self-government so that these activities may provide training in citizenship and leadership. He cooperates with the Director of Housing in providing counseling for men who live in University housing facilities.

OFFICE OF THE DEAN OF WOMEN

The Dean of Women has broad responsibilities for the welfare of women students. She serves as a counselor to students on a variety of problems and interests including personal, academic, financial and social.

In cooperation with the Dean of Men and the Adviser to Student Organizations she serves as an adviser to student government and other student organizations.

The Dean of Women in cooperation with the Director of Housing, acts in an administrative, supervisory, and counseling capacity with relation to the University residence halls and women's fraternity houses.

OFFICE OF THE DIRECTOR OF HOUSING

The Office of the Director of Housing coordinates the residence halls and Flavet programs and operations and compiles off-campus housing information and listings. See section on "Housing" for details.

OFFICE OF THE ADVISER TO FOREIGN STUDENTS

The Adviser to Foreign Students is the coordinator of arrangements for all alien students at the University. His office cooperates with other University agencies in handling admissions and financial aids for students from abroad. The office is primarily responsible for the reception and orientation of new foreign students and for all of the University's relations with the U. S. Immigration Service. The Adviser to Foreign Students cooperates with other officials and agencies of the University in providing necessary counseling for foreign students on personal, academic, financial, language or social problems. Assistance in an advisory capacity is provided for persons interested in study or travel abroad and for individuals and organizations concerned with international understanding and intercultural exchange.

ENGLISH LANGUAGE INSTITUTE FOR FOREIGN STUDENTS

The Department of Speech conducts each summer an Institute which is designed to enable foreign students, for whom English is a second language, to

participate successfully in college courses conducted in English and to adjust to an American-English speaking community. The Institute provides nine weeks intensive instruction in speaking, understanding, writing, and reading English. The classes meet six hours daily.

Enrollment is limited and preference is given to students who plan to continue study at the University of Florida. This is a special program which does not carry University credit.

Address inquiries to the Adviser to Foreign Students.

STUDENT ORGANIZATIONS OFFICE

The student organizations office is interested in the activities of all organized student groups on the campus. It maintains complete records of these groups, including date of recognition, officers, constitution, etc. This office is also the authorization agency for social activities of all student organizations and provides information regarding regulations for such activities.

The Assistant Dean of Men is in charge of the student organizations office and should be contacted regarding the formation and recognition of new student organizations and regarding any problems which may arise concerning the operation of student organizations.

UNIVERSITY PLACEMENT SERVICE

University Placement Service is the core of the University placement system. It serves as the coordinating agency for all placement activity on campus by working in cooperation with the University departments, schools, and colleges. At the present stage of development, the U. P. S. supplements the placement activities which are carried on by various colleges, and offers direct assistance to graduating students of colleges who do not have their own placement activity.

The primary objective of the placement system is to assist students in the problem of finding suitable employment following graduation. This is done by supplying students with vocational information, information concerning job opportunities, and also assisting them in the preparation of credentials for presentation to prospective employers.

Representatives from business, industry, and government who visit the campus or write this office are given every opportunity to engage qualified University of Florida graduates.

FLORIDA CENTER OF CLINICAL SERVICES

The services of the five clinics which operate as a coordinated unit are available to all University students without charge. Students are urged to seek assistance before their problems or difficulties become aggravated. The services of the clinics are available to the residents of the State of Florida for diagnostic purposes, therapy and counseling to the extent that off-campus subjects are needed in training programs and as personnel and facilities will permit.

PSYCHOLOGICAL CLINIC

One of the functions of this unit is to aid the student on an individual basis to plan a vocational objective consistent with his capacities, interests, and temperament. Approved test and counseling methods are used, and results are supplemented by detailed occupational information. Other services of this unit include help to students who find their work hampered by worries, adjustment difficulties, and other troublesome conditions. In addition to the above functions, the Psychological Clinic works closely with the Department of Psychology in its program for the training of clinical psychologists and counseling psychologists.

SPEECH AND HEARING CLINIC

This clinic conducts a speech and hearing examination during orientation week of all freshmen and transfer students. The personnel of this unit are available to all University students who have speech and hearing problems which are handicapping in nature. In addition to losses in hearing such impairments include: stuttering, cleft palate speech, articulatory problems, voice abnormalities and other deviations from acceptability. This clinic operates as a laboratory for those students in the Speech Department who are training for speech and hearing therapists, speech pathologists, and audiologists.

READING LABORATORY AND CLINIC

Through the use of interviews and diagnostic tests, this clinic plans a program of study and training in improving reading skills for each individual who demonstrates a need for assistance. The program is planned according to the needs of the student, the time available in the student's schedule, and the amount of training necessary for permanent improvement of reading skills. In addition to remedial functions, this unit trains teachers and graduate students in the techniques of diagnosis and remediation. The clinic also carries on a program of research in many aspects of the field of reading and aids students and faculty members engaged in allied research. This clinic is an integral part of the C3 program.

ADAPTED EXERCISES CLINIC

This program assists those students who have physical deviations which necessitate individual consideration in developing a sports program that is within the limits of their physical capacity. Due consideration is given to the individual's interests as well as to the social and recreational needs for adult life. Programs of functional exercise are provided for those students having physical deviations that can be corrected or improved. The work is conducted under careful supervision and is based on adequate medical diagnosis and information.

MARRIAGE AND FAMILY CLINIC

The Marriage and Family Clinic deals with marital, premarital and family adjustment problems. Clients are assisted in gaining insight into problems and

in weighing advantages and disadvantages of alternative adjustments. University students will find understanding and help in the solution of their marital and premarital problems.

OFFICE OF STUDENT PERSONNEL RECORDS

Using various sources, the Office of Student Personnel Records collects and integrates information concerning social and scholastic activities of each student. It makes this information available to qualified counselors who aid the student in making educational, social, psychological, and vocational adjustment. The keeping of personnel records is an efford in the understanding of, and service to, the individual student as he has contact not only with the classroom, but also with all phases of his university life.

STUDENT EMPLOYMENT

Every effort is made to aid qualified students in obtaining part-time employment. Opportunities are limited; consequently the number of part-time jobs available does not approach the number of applicants seeking these jobs. Every effort is made to place students in work that utilizes their training and experience.

Each student who is employed by the University must have an honor point average of C for the semester or term immediately preceding his employment. The average rate of pay per hour is between 60 cents and $1.00; the average earnings per month are about $50.

Student employment is directed by the Committee on Student Aid, Scholarships, and Awards, with the Assistant Dean of Men administering the program. All applications for work should be made prior to the opening of the semester in which employment is desired. Application for work, however, may be filed at any time.

Inquiries should be addressed to:

Assistant Dean of Men
University of Florida
Gainesville, Florida

SCHOLARSHIPS AND LOAN FUNDS

For information on scholarships and loans at the University of Florida students should refer to the Dean of Students, who is chairman of the Committee on Student Aid, Scholarships and Awards, and to the special bulletin on Scholarships, Loan Funds and Student Employment for details on the various types of aid.

HOUSING

GENERAL INFORMATION

Each student must make personal arrangement for his housing either by (1) applying to the Office of the Director of Housing for assignment to the University Housing Facilities or, (2) in the case of an upperclassman who wishes to do so, obtaining an accommodation in private housing or in his fraternity house.

All inquiries concerning housing applications, deposits, or rent payments in University Housing Facilities should be addressed to the Director of Housing, University of Florida, Gainesville. Checks or money orders for room deposits or rent payments should be made payable to the University of Florida and mailed to the Office of the Business Manager, Cashier, together with the application or rent invoice. Cash should NOT be sent through the mail.

An application for housing space may be filed at any time. Prospective freshmen are urged to apply for housing as early as possible.

A deposit payment of ten dollars must accompany the application for housing. Each applicant is given advance notice of exact assignment and deadline date for rent payment, if possible. Each applicant should read carefully the terms and conditions covering housing assignments as stated on the back of the application form and on the notification of assignment.

Roommate requests are honored wherever possible, provided the individuals wishing to room together submit their applications and pay room deposits at the same date, clearly indicate on their respective applications their desire to room together. A large number of selected foreign students are available for assignment as roommates with American students who are interested in foreign languages, trade, and international relations; any student interested in the program should indicate this on his application.

RESIDENCE REGULATIONS

All freshman men and all single undergraduate women, with the exception of those whose residence is Gainesville or vicinity, are required to live in University Housing Facilities as long as space is available. With University approval undergraduate women students, excepting freshmen, may live in their sorority houses.

HOUSING ADMINISTRATION AND SERVICES

Carefully selected and trained personnel are in charge of each area. Students with personal problems or questions concerning procedure or policy are aided by Head Residents, Resident Advisers, and Student Counselors.

The rates quoted are subject to change. All facilities are equipped with basic furnishings of beds, mattresses, dressers, desks, and chairs. Residents are encouraged to bring their own drapes, pictures, bedspreads, rugs, and lamps.

Linens may be rented on a weekly exchange basis; pillows, blankets, and some extra equipment may be rented on a term or semester basis. Linen rates per week are: sheets 15¢ each; towels, 8¢ each; pillow cases, 6¢ each. Blankets, pillows, and lamps are 60¢ per Summer Session.

Heavy luggage may be sent ahead, prepaid, addressed in the student's name and showing his assigned room number. Such shipments will be held until called for by the student. The University assumes no responsibility beyond the exercise of reasonable care for any shipment so received.

RESIDENCE HALLS FOR SINGLE STUDENTS

Mallory and Yulee Halls

These halls of modern design and of brick, concrete, and steel construction are normally reserved for undergraduate women students. Features include:

office-to-room intercommunication system; post-office boxes for each room in building lobbies; large lounge for each building; study lounge on each upper floor; large recreation rooms; laundry and other self-service facilities. Double and single rooms only, with the number of single rooms limited. Community bath facilities on each floor. Hot water system thermostatically controlled for each building. Fluorescent lighting. Rates per 8-weeks Summer Session (subject to change): Single room $46.75 per student; double room $40.00 per student; double room assigned as single $60.00 per student.

Broward Hall

Similar in construction and facilities to those above. To be assigned to Graduate women students only for Summer Session. Rates per 8-weeks summer session (subject to change): double room $40.00 per student; double room assigned as single, $60.00 per student. If new Women's Hall is completed it may be assigned to Graduate Women for Summer Session.

Buckman, Thomas, Sledd, and Fletcher Halls

The four halls of modern brick, concrete, and steel construction are normally reserved for men students. Each hall is divided into separate sections with accommodations for from 30 to 48 students per section. All but a few rooms have lavoratories, and there is a community bath on each floor in each section. There are lounges, recreation rooms, and laundry facilities in the area. Room types: two-room suites for two, double rooms for two or three students, and single rooms. Summer Session rates range from $26.50 to $33.00 per student per 8-weeks Summer Session. (Murphree Hall will not be available for use by single students during the Summer Session.)

FACILITIES FOR MARRIED COUPLES AND FOR WOMEN WITH CHILDREN

Three Apartment Villages (Flavets), located on-campus, have been provided through the Public Housing Authority. Applications may be filed at any time and should be sent as soon as possible. Although applications are being accepted from non-veterans for assignment, no such assignment can be made until all veteran applications have been placed. Applications from married veterans have exceeded the space available for the past three years and it is doubtful that any non-veteran can expect assignment for the 1958 Summer Session. Flavet I contains 26 buildings of one-story, temporary construction, divided into 100 apartment units of one, two, or three bedrooms. Flavet II, similar to Flavet I in construction, contains 20 buildings divided into 76 apartment units, of one, two, or three bedrooms. Flavet III contains 54 buildings, of two-story, temporary construction, divided into 448 apartment units of one or two bedrooms. All apartments are equipped with basic furniture requirements, but residents must furnish their own linens, rugs, kitchenware, etc. Cooking and heating are by gas, metered to the individual apartments. Electricity consumption in excess of the basic minimum is paid on a monthly basis on meter readings. Rent rates per month (including basic electricity) are one bedroom apartment, $26.75; two-bedroom apartment, $29.50; three-bedroom apartment, $32.50.

Murphree Hall, Sections J and K will be available for assignment to couples

and to women with children. The accommodations consist of two room suites (study room and bedroom). All suites have lavatories, and there is a community bath with shower and toilet facilities on each floor in each section. Cooking or preparation of food is not permitted. Summer Session rates are $59.50 per suite per eight weeks term.

OFF-CAMPUS HOUSING

Private homes and privately operated rooming houses and apartments provide many accommodations for students.

Off-campus listings are maintained in the Off-Campus Section of the Housing Office at 1504 W. University Ave. but are not compiled for mailing since availability changes constantly and a mutually satisfactory rental arrangement can normally be made by the student only after personal inspection of facilities and conference with the householder. Students seeking off-campus housing should come to Gainesville well before the school period to confer with the Off-Campus Section about accommodations. Advance appointments for conferences may be made.

Arrangements for the Summer Session should be completed between the middle of April and the end of May.

Considerable information on summer only sub-let rentals is usually available by the first part of May. Office hours are maintained on Saturday.

COOPERATIVE LIVING ORGANIZATION

The Cooperative Living Organization, organized and operated by students to furnish economical living accommodations for its membership, is located at 117 NW 15th St. The qualifications for membership are financial need, scholastic ability, and references of good character. In order to secure membership in the CLO, students should apply to the CLO Vice-President at the above address.

SPRINGFIELD HALL

Springfield Hall, organized in September 1951, is the first women's living cooperative to be established on the campus. It is sponsored by the Wesley Foundation and is open to any student at the University who is interested in Christian cooperative living. It is organized on a non-profit basis, with each member being assessed her pro rata share of the actual operating cost.

Application for membership may be made at the Wesley Foundation, 1320 West University Avenue.

FRATERNITIES AND SORORITIES

Most national fraternity and sorority chapters maintain their own houses adjacent to the University campus. Freshman women are not permitted to live in sorority houses. Special regulations apply to freshman men living in their fraternity houses. University student regulations are in effect for all sorority and fraternity houses.

GENERAL INFORMATION

LECTURES, PLAYS AND EXHIBITIONS

The University presents outstanding lectures as part of the general educational and cultural life of the campus. The speakers are selected with a view to offering to the University community stimulating presentations in the different areas of learning.

During the Summer Session, under the direction of the Department of Speech, full length plays, experimental one-act plays, and interpretative reading programs are presented. The University provides facilities for high grade performances under competent direction.

Exhibitions of contemporary work in the arts are brought to the campus under the sponsorship of the University Center of the Arts. Such exhibitions provide an opportunity to study examples of the best contemporary work in painting, industrial design, furniture, crafts, community planning, architecture, and the other arts.

RELIGIOUS AND SOCIAL LIFE

The leading religious denominations have attractive places of worship and students are welcome at every service. Students interested in the study of religion and in preparing themselves for religious leadership may take courses offered by the Department of Religion. Vesper services are conducted weekly on the campus lawn or in the Florida Union.

UNIVERSITY OF FLORIDA LIBRARIES SERVICES

The University Libraries, consisting of the General Library and 12 college, school and departmental libraries, contain more than 500,000 volumes and receive currently approximately 3500 serials.

The larger part of the library holdings are kept in the General Library building where four reading rooms offer seating space for 1200 readers. Located on the first floor is the University College Reading Room which has on open shelves some 8000 volumes useful to students in the first two years of college. The Humanities Reading Room and the Social Sciences Reading Room, on the second floor, are designed primarily as centers of library activity for the upperclassmen in the humanistic and the social studies. Around the walls on open shelves in each of these rooms are approximately 15,000 volumes and current issues of learned journals. On the third floor is the Science Reading Room with books and complete sets of journals in psychology, general science, mathematics, physics, geology and geography. Additional services in the General Library are the Browsing Room for recreational reading, the Map Alcove and Reading Room, music rooms, seminar rooms, and carrels and study cubicles for faculty members and graduate students.

The Library collection is particularly strong in Floridiana with research centered in the P. K. Yonge Library of Florida History, located on the first floor of the General Library building. Manuscripts and books by Florida authors are col-

lected in the Florida Authors Room, which is the center for activity in creative writing.

Libraries for Agriculture, Architecture and Fine Arts, Biology, Chemistry-Pharmacy, Education, Engineering, Forestry, and Law are located in or near buildings housing the corresponding instructional units. The Library serving the extension activities of the University is located in the Seagle Building. The P. K. Yonge Laboratory School Library serves the Laboratory School.

STUDENT HEALTH SERVICE

Applicants for admission to the University are furnished a medical history and physical examination form by the Registrar's Office. The medical history is completed by the applicant before going to his physician for the physical examination. The physical examination must be performed and completed by a licensed Doctor of Medicine (M.D.) and mailed by the doctor directly to the Director, Student Health Department, University of Florida, Gainesville, Florida, using the business reply envelope supplied for that purpose. The medical history and physical examination must be reviewed by a University Physician before the applicant is cleared for registration in the University. The type of physical education for which the applicant is qualified, and the physical eligibility of male students for R.O.T.C. training, is determined on the basis of this pre-entrance examination, after conference and possible further examinations of those with reported physical defects. In cases where a defect is thought to exist, the student is requested to forward a letter from the family physician giving full details of diagnosis and treatment, in order that these may be incorporated in the record for later reference if treatment should be required, and to further determine eligibility for physical education and R. O. T. C.

The Student Health Department strives to prevent students with communicable diseases from entering the University. All students enrolled at the University are given annual chest x-rays by the State Health Department and every effort is made to detect evidence of tuberculosis of which the student may be entirely unaware. (Faculty members and employees of the University are also given annual chest x-rays.) Late registrants will be charged a special fee of $2.00 for their chest x-ray if units of the State Health Department or the Alachua County Health Department are not available. Students must have been successfully vaccinated against smallpox within the past five years. No exceptions are made to this ruling. Students who have not been vaccinated within five years are given the vaccination during registration week. The Infirmary, however, advises students to take care of this requirement before coming to the University, as the immunization limits participation in swimming and other required activities for a number of days after being applied. It is also advised that all students be immunized for typhoid fever and tetanus prior to arrival in Gainesville.

The University maintains the Student Health Department in the Infirmary building on the campus for the protection and medical care of the students in residence. The Outpatient Clinic is open during the day from 8:00 A.M. to 12:00 Midnight, to provide all students in need of medical care with consultation and treatment. Between the hours of 12:00 Midnight and 8:00 A.M., the building is locked, but students who are in need of medical care are seen by the Nursing Staff stationed on the hospital floors of the building. A call-bell at the entrance will summon a Nurse to the Clinic. A physician is on 24 hour call to care for emergencies too severe to be cared for by the Nursing Staff.

The Hospital, consisting of 65 beds, provides the students in need of hospitalization with twenty-four hour general nursing care. Patients entering the hospital are under constant observation by a University Physician. Between the hour of 9:30 P.M. and 7:30 A.M., an automobile is kept at the Infirmary to transport students from the Residence Halls to the Infirmary for medical care. Students are urged to report to the Infirmary at the first sign of an illness. In all cases where the illness is thought to be of more than average severity, parents will be notified by collect telephone by physician in charge of the case.

The Student Health Department gives as complete a diagnostic, treatment, and public health program as possible within the limitations of its personnel and equipment. It is staffed and organized for treating the acute illnesses which commonly occur while the student is in residence at the University. Facilities at the University Infirmary include the services of a competent medical staff, a psychiatrist, x-ray and clinical laboratories, pharmacy, and a physical therapy unit.

There are no facilities for dental work or eye refractions in the Student Health Department and therefore students are urged to have defects of vision and teeth corrected before coming to the University.

Some minor surgery is performed at the University Infirmary, but no major surgery. Major surgical operations are performed only with the consent of the student and/or parent or guardian, and at their expense. Whenever an emergency is imperative, the student shall be referred to a competent surgeon and transferred to the Alachua General Hospital in Gainesville, which is fully approved for surgery by the American College of Surgeons. Students receiving severe, multiple or compound fractures will be handled in the same manner as students in need of emergency surgery.

Competent physicians and surgeons in Gainesville cooperate readily with the Student Health Department in consultations. Whenever a student is found to be in need of a consultant, the University Physician will arrange for such a consultation. Local physicians are also available for medical service to students at their places of residence at the student's expense.

Health service is available only to those students currently enrolled in the University who have paid the student health fee. In the case of married students, who are unacquainted with local physicians, the Student Health Department will be glad to recommend well qualified physicians to attend their families.

The Health Fee does not include surgery, consultation, or special duty nursing. These must be paid by the patient. Laboratory work done at the Infirmary is free of charge, but any work that has to be referred elsewhere is the responsibility of the patient. Diagnostic x-ray service is offered at a very nominal cost. All x-rays are interpreted by a qualified Radiologist. A charge of $2.20 per day is made for students admitted to the Infirmary as inpatients.

The University is not responsible for the medical care of students during vacations, but, in certain instances, it may make special arrangements for the continued care of students who were hospitalized before the vacation period.

During epidemics, the facilities of the Student Health Department may be so overtaxed that the care of all ill students at the Infirmary will be impossible. In such an emergency every effort will be made to provide for the care of students outside of the Infirmary, but the Student Health Department will not assume payment for services rendered by outside physicians or other hospitals.

ANNOUNCEMENTS

The *Orange and Blue Bulletin* is the official bulletin of the Summer Session. This mimeographed sheet, published every other day during the Summer Session and posted on all bulletin boards, carries notices of changes in schedule, meetings, and other pertinent information. Announcements made in the General Assembly; notices on the bulletin boards in Florida Union, Peabody Hall, and Anderson Hall; and news items in the *Summer Gator* serve to keep the Summer Session students informed concerning student activities.

ORGANIZATIONS

PHI KAPPA PHI

A chapter of the Honor Society of Phi Kappa Phi was established at the University in 1912. To be eligible for consideration for membership, a student must previously have earned at the University at least thirty semester hours of credit, must have been guilty of no serious breach of discipline, and must stand among the upper tenth of all candidates for degrees in his college. Eligibility for consideration for membership is assured every student within an honor point average of 3.30 or higher, but a student who comes within the quota of his college may be considered if his honor point average is not below 3.00. Graduate students meeting certain prescribed requirements are also considered for membership.

GAMMA SIGMA DELTA

A chapter of Gamma Sigma Delta, the Honor Society of Agriculture, was established at the University in 1955. The objectives of the Society are to encourage high standards of scholarship in all branches of Agricultural Science and Education and a high degree of excellence in the practice of agricultural pursuits, by the election to membership of those students of the graduating and postgraduate classes in the Agricultural College who have shown exceptional ability during their undergraduate or graduate work, and of those alumni and faculty members who have rendered signal service to the cause of agricultural development. Minimum requirements for membership for graduating Seniors are, in general, 3.0 average, at least one year's residence at time of consideration for election, and high moral character. Graduate students must have shown ability to do satisfactory work in advanced study in agriculture, and must have completed at least one semester or its equivalent in the Graduate School at the University of Florida.

KAPPA DELTA PI

The Upsilon Chapter of Kappa Delta Pi was established at the University of Florida in 1923. The purpose of the society is to recognize and promote merit in educational study and service. Both men and women are admitted to membership. Members are chosen from juniors, seniors, graduate students, faculty, and alumni. Requirements for membership are, in general, as follows: a scholastic average in the upper quintile; evidence of abiding interest in educational service; a good professional attitude; and good personal-social characteristics. During the Summer Session the chapter holds several meetings.

PHI BETA KAPPA

Phi Beta Kappa was established on the campus of the University of Florida in 1938. It is the oldest national fraternity, being founded in 1776. In conformity with the national objectives of the society, the University of Florida chapter restricts election to the College of Arts and Sciences. Not more than 15 per cent of the senior class graduating in each semester, including the graduating class of the Summer Session is eligible for election.

In addition to conferring membership upon qualified seniors in the College of Arts and Sciences, the society seeks, by means of an Award in Recognition of Creative Achievement, to honor each year not more than one graduating senior from all the colleges on the campus, who, irrespective of his honor point average, has distinguished himself throughout his undergraduate career in such fields of activity as creative writing, damatics, and forensics, the fine arts, or any other liberal discipline, and has revealed a decided talent, a persistent interest, and a prospect of mature achievement in later life.

PHI DELTA KAPPA

Beta Xi chapter of Phi Delta Kappa, national professional education fraternity for men, was installed at the University of Florida early in 1949. Dedicated to ideals of research, service and leadership, this organization is one of the oldest and largest professional fraternities. Men are chosen for Phi Delta Kappa on the basis of scholarship, leadership, potentiality, and qualities of personality considered as promising for the development of public education in the state and in the nation.

RECREATION

THE FLORIDA UNION

The Florida Union, the official center of student activities, is financed primarily by student activities fees. Some of the facilities and services offered by the Union include music listening rooms, a craft and hobby shop, photographic darkrooms, browsing library, game room, and lounges where students may spend leisure hours. Fifteen guest rooms are available for guests of students and University personnel. The Union also provides an embosograf poster service, information desk, a Western Union substation, auditorium, and meeting rooms for student activity groups. Offices for the President of the Student Body, the Executive Council, Honor Court, and all student publications are located in the Florida Union.

The Florida Union Board for student activities composed of students interested in planning student activities, sponsors a variety of social programs for the student body. Some of the regular activities sponsored by the Union Board are bridge tournaments, dancing classes, coffee hours, movies, outings, and dances. Other special activities are sponsored by the Union Board during the year. The committees of this board are open to all interested students.

The University's Camp Wauburg operated by the Florida Union is a recreational area for the exclusive use of University personnel. This area is located nine miles south of the campus. Facilities include a large picnic area, a recrea-

tional building, a bath house, and a play ground area for volley ball, horseshoes, badminton, softball. Camp Wauburg has swimming, boating, and fishing facilities.

INTRAMURAL AND RECREATIONAL ATHLETICS

A broad recreational program of athletics will be conducted for the students and faculty by the College of Physical Education and Health during the Summer Session.

A Summer Session all-campus league will be organized with competition in softball, tennis (singles and mixed doubles), shuffleboard (singles and mixed doubles), swimming, volleyball, table tennis, and handball tournaments, appropriate awards will be made to winning teams and individuals in all sports.

A sports' clinic will be conducted prior to the tennis, volleyball, and handball tournaments. Students have the opportunity to learn skills in recreational sports through the Department of Required Physical Education. Further information may be obtained at Room 134, Florida Gymnasium.

The athletic and physical educational facilities, including the use of the swimming pool and equipment room service, will be available to all *bona fide* University students. Use of these services and facilities will also be extended to students' families, faculty, employees, and their immediate families, upon payment of a fee of $1.00 per individual. The *Summer Gator*, the *Orange and Blue Bulletin*, and the *Florida Intramural Bulletin* will carry current notices and announcements about various phases of the program.

SWIMMING POOL

The swimming pool will be open daily during the Summer Session. Dressing facilities for women are located in the Women's Gymnasium. The facilities for men are located in Florida Gymnasium.

THE DIVISION OF MUSIC

The Division of Music offers opportunities during the Summer Session for those students interested in participating in bands, orchestras and choral groups.

RELIGIOUS AND SOCIAL LIFE

The leading religious denominations have attractive places of worship and students are welcome at every service. Students interested in the study of religion and in preparing themselves for religious leadership may take courses offered by the Department of Religion.

ACADEMIC REGULATIONS

STUDENT RESPONSIBILITY

Each student must assume full responsibility for registering for the proper courses and for fulfilling all requirements for his degree. Several days before registration students should confer with the deans of their respective colleges regarding choice of courses. Juniors and seniors should confer with the heads of the departments in which they expect to earn majors. Candidates for graduation must file, in the office of the Registrar, formal application for a degree and

must pay the diploma fee very early in the term in which they expect to receive the degree. The official calendar shows the latest day on which this can be done.

Courses can be dropped or changed only with the approval of the dean of the college in which the student is registered and by presentation of the cards authorizing the change at the office of the Registrar.

CREDITS

The term credit as used in this bulletin in reference to courses is equal to one semester hour.

RESIDENCE REQUIREMENTS

1. The minimum residence requirement for the baccalaureate degree is two semesters, or one semester and three six-week summer terms, or one semester and two eight-week summer terms, or one semester and two nine-week summer terms, or five six-week summer terms, or four eight-week summer terms or four nine-week summer terms. New students offering advanced standing must meet this requirement after entrance to the University. Students who break their residence at the University by attending another institution for credit toward the degree must meet this requirement after re-entering the University.

2. Students are required to complete the last thirty credit hours (except in the College of Law) applied toward the baccalaureate degree during regular residence in the respective college from which they expect to be graduated. Exception to this regulation may be made only upon written petition approved by the faculty of the college concerned, but in no case may the amount of extension work permitted exceed more than twelve of the last thirty-six hours required for a baccalaureate degree.

3. For the degree of Bachelor of Laws, a student must complete at least 96 weeks of study in residence in an accredited law school of which at least 62 must have been in residence in the College of Law, University of Florida. The last 28 credits and the last 30 weeks of study must be in residence in this College unless other arrangements are made in advance by written petition approved by the faculty of the College of Law. (In the case of a student admitted prior to September, 1953, completion of at least 90 weeks of study in residence at an accredited law school is required of which at least 56 weeks must have been in residence at this College.)

4. For residence requirements for the various graduate degrees see the Graduate School section of this bulletin.

AMOUNT OF EXTENSION WORK PERMITTED

No student will be allowed to take more than one-fourth of the credits toward a degree by correspondence study and extension class work. Extension work to apply on the last thirty hours is authorized only by special action of the faculty of the college in which a student is registered. Such authorization must be obtained prior to enrollment in extension work. If authorization is given, no student is permitted to earn more than twelve of the last thirty-six hours in this manner. Under no circumstances will a student in residence be permitted to register for a correspondence course if that course is being offered in the Summer Session.

MAXIMUM AND MINIMUM LOAD

The maximum load for which an undergraduate may register in an eight-week term is 9 semester hours. The maximum load in a six-week term is 6 semester hours.

The minimum load for any student is three semester hours. Original registration for less than three hours must be approved by the Dean of the college in which the student is enrolled. After registration, the student may reduce his load to less than three hours only with the approval of the Senate Committee on Student Petitions.

UNCLASSIFIED STUDENTS

1. This group will include (a) students from other colleges and universities who wish to earn credits in the Summer Session to be transferred eventually to their respective institutions, and (b) other students not candidates for degrees.

2. In the event any student who has attended a Summer Session as an unclassified student later wishes to become a candidate for a degree in one of the colleges or schools of the University, he may do so (1) by regularizing his admission to the University (present all the credentials required) and (2) by meeting the requirements (in effect at the time of his application for candidacy) for admission to the school or college he desires to enter.

3. If such a student is admitted to candidacy for a degree, credits earned while an unclassified student will be accepted insofar as they apply toward the degree requirements (in effect at the time he is admitted to candidacy) of the college or school chosen by the student. A student must have been registered as a regular student in the college or school from which he expects to receive the Bachelor's Degree for at least three six-week summer terms or two eight-week summer terms, and in the Graduate School for at least five summer terms for the Master's Degree. The residence requirement (see above) in the University will not be waived in any case.

4. Students regularly enrolled during the academic year cannot become unclassified students during the Summer Session.

5. Each student registered as an unclassified student will be given a definite statement of the policies governing the application for admission to candidacy in the various colleges and schools. This statement will make clear that credits earned while a student is registered as an unclassified student can be applied toward a degree in the college of his choice only if under regular procedure this credit will apply toward that degree.

6. The registration blanks for unclassified students will be approved by the Registrar and assistants chosen by him from the faculty.

ABSENCES OR UNSATISFACTORY WORK

Absences count from the first meeting of the class rather than from the date a student registers for a class.

A. If any student accumulates absences or fails to do class work to the extent that further enrollment in the class appears to be of little value to him or detri-

mental to the best interest of the class, it shall be the duty of the instructor to warn such student in writing that further absences or failure to do class work will cause him to be suspended from the course with a failing grade. Where possible this warning will be delivered personally; otherwise, it will be mailed to the student's last University address by the Registrar. Instructors shall immediately report all such warnings to the department head or course chairman. Should any absences or failure to do class work be incurred after this warning, the student will be suspended from the class and be given a failing grade by the Registrar upon receipt of notice from the instructor showing the date of warning.

Should this reduce the load of the student below the minimum required, he will be suspended from the University.

B. When a student is suspended from a course under the provisions of A above, his parents shall be notified in writing by the Registrar.

C. A student who has been warned for absences or unsatisfactory work in any class should not incur additional absences in that course even though he has not been absent from the class for nine scholastic days. It is the responsibility of the student to see that his class work and attendance are satisfactory.

PROBATION, SUSPENSION, AND EXCLUSION FOR ACADEMIC REASONS

The University of Florida accepts the responsibility of providing sound higher education. This includes the obligation to both the public and to the student of providing good higher education in an economical and efficient manner. In order to discharge this responsibility, the University must require reasonable academic progress from its students in return for the opportunity afforded them by a tax supported state university. To continue the registration of students who have demonstrated that they do not possess the necessary ability, or preparation, or industry, or maturity to obtain a reasonable benefit from a program of University study is inconsistent with this responsibility.

Consequently, the University of Florida Senate has enacted the following University regulations covering probation, suspension, and exclusion for academic reasons. Any college of the University may enforce additional academic standards and each student is responsible for observing the regulations of his college relating to such additional standards.

It is important to note that a student may be placed on various kinds of probation for reasons other than those listed below. For example, he may be admitted to the University on a probationary basis or he may be placed on disciplinary probation by reason of conduct or, in some cases, he may be placed on probation by the Committee on Student Petitions. In cases such as the foregoing the individual student will receive in writing a specific set of conditions which he must meet in order to remove the probation. In most cases these conditions will require loads, grades, etc., that are above the minimums set forth below. Inasmuch as such a student will have been placed on one of these specific probations only because of some previous academic difficulty or misconduct, in his particular case the specific terms of probation which are set forth for him become the necessary minimum achievement rather than the conditions set forth below.

ACADEMIC PROBATION

Lower Division Students:

1. A Lower Division student who fails to maintain a 1.0 honor point average for all work attempted in his first or second semester at the University of Florida will be placed on academic probation for his next semester.

2. A Lower Division student on academic probation (Under Article IV or XV) during his second semester will be ineligible for further registration in the University unless he maintains a 1.0 honor point average in all work attempted in that semester.

3. A Lower Division student who has attempted more than two semesters and who fails to maintain a 1.5 honor point average on all work attempted each semester thereafter will be placed on academic probation for his next semester.

4. A Lower Division student who has attempted more than two semesters and who is on academic probation (Under Article IV or XV) shall be ineligible for further registration in the University unless he maintains a 1.5 honor point average in all work attempted in that semester, or has a 1.5 cumulative honor point average in the total of all work attempted to date.

5. A Lower Division student who has attempted six semesters of work in the Lower Division shall be ineligible for further registration in the University unless he has been admitted to an Upper Division college.

A semester during which a student withdraws after the last date for dropping courses without a failing grade and any semester in which a student is suspended for non-attendance or unsatisfactory work shall be considered as a semester attempted in administering these regulations (Sections 1 through 5 above).

Upper Division Students:

6. Any Upper Division student who fails to maintain a 1.8 honor point average for all work attempted in any semester shall be placed on academic probation for his next semester.

7. An Upper Division student on academic probation (under Article IV or XV) will be ineligible for further registration in the University unless he maintains a 2.0 honor point average in all work attempted that semester or has 2.0 cumulative honor point average in the total of all work attempted while registered in his present Upper Division college.

SUSPENSION

All Undergraduate Students:

8. All Undergraduate students (all those classified other than 6) who do not receive passing grades (A, B, C, or D) in more than one-half of the hours attempted in any term or semester shall be suspended immediately from the University for one full semester; however, failure in only one course carrying five semester hours credit or less shall not cause the student to be suspended under this provision. All Undergraduate students who are dropped from a course for excessive absences or unsatisfactory work and as a result of such drop are left

with a load of less than 12 semester hours will be suspended for one full semester. A student eligible to return to the University after such a suspension shall be placed on academic probation for his next semester. The terms for satisfying his probation shall be those provided above appropriate to the number of semesters attempted. A second suspension for academic reasons shall be final and the student will not be eligible for further attendance at the University.

Graduate Students:

9. Any graduate student may be denied further registration in the University or in his graduate major when his progress toward completion of his planned graduate program becomes unsatisfactory.

ADMINISTRATIVE PROVISIONS:

10. All actions taken under these regulations shall be reflected by appropriate notations on the student's record.

11. A student attending a summer session prior to his probational semester may satisfy the terms of his probation if he obtains the necessary probation honor point average as indicated above, computed by taking the grades of his last semester and summer session together.

COMPREHENSIVE EXAMINATIONS

The comprehensive course examinations (of which the student must successfully pass six or more to complete the program of the University College) are administered by the Board of University Examiners and are given in January, May, and August of each year. A student must be familiar with the work of the various courses and be able to think in the several fields in a comprehensive way in order to pass these examinations. Standings on the comprehensive examinations are issued by the Board of Examiners and are not subject to change by any other agency.

APPLICATIONS FOR COMPREHENSIVE EXAMINATIONS

University College students who are enrolled in a course at the time the examination is given need not make application for it. University College students who are not enrolled in a course at the time an examination is given and who wish to take the comprehensive examination must apply in writing to the Board of Examiners for permission prior to the last date set for filing such applications. *Applications will not be accepted from students registered in the colleges of the Upper Division.* Before the application is accepted the applicant will be required to furnish the Board of Examiners with proof that this privilege has not been used to avoid the payment of usual University fees. Applications will be accepted only for those examinations which are administered by the Board of Examiners. The Board of Examiners is the only agency authorized to give University College students examinations by application.

THE UNIVERSITY COLLEGE

INTRODUCTORY STATEMENT

In a reorganization at the University of Florida in 1935, all freshmen and sophomores were placed in one college. The University College administers all

the work of the Lower Division, which includes the pre-professional work for the Upper Division schools and colleges and a core program of basic education for all students. In 1944 the American Council on Education defined this program: "General education refers to those phases of nonspecialized and non-vocational education that should be the common denominator, so to speak, of educated persons . . . the type of education which the majority of our people must have if they are to be good citizens, parents, and workers." During his freshman and sophomore years at the University, a student's time is about evenly divided between these objectives of general education and those of pre-professional or professional preparation.

While fully accepting its responsibility toward the professional training of students who remain four years or longer and earn degrees, the University of Florida as a state institution also accepts its civic responsibility to help those who spend only one or two years at the University. These students—more than two-thirds of all enrolled—are not "failures" because they do not continue and earn degrees, and they probably deserve more from the state university than an odd assortment of only "introductory courses." Consequently at the University of Florida a group of comprehensive courses have been worked out to give some unity and meaning to a beginner's program. These comprehensive courses that make up the core program are:

1. *American Institutions* (known hereafter as C-1)
2. *The Physical Sciences* (C-2)
3. *Reading, Speaking and Writing:* Freshman English (C-3)
4. *Practical Logic:* Straight Thinking (C-41)
   Fundamental Mathematics (C-42)
5. *The Humanities* (C-5)
6 *Biological Science* (C-6)

GUIDANCE

If a freshman is still undecided about his life's work, he is not urged to guess on registration day. His program may be made up largely from the comprehensives which help him direct his thinking toward a desirable objective, together with approved electives that may further enable him to explore interests and needs. But whether the student is decided or undecided about his life's work, these comprehensive courses provide basic preparation that every educated person should have.

Thus since the purpose of general education is to replace fragmentation, the program absorbs much of the responsibility for guidance. Every subject or course of the University College program is designed to *guide* the student. During the time that he is making tentative steps toward a profession by taking special subjects to test aptitudes, interests, and ability, he is also studying the several great areas of human understanding and achievement. The work in the University College presents materials which are directly related to life experiences and which will immediately become a part of the student's thinking to guide him to making correct *next steps.* Thus the whole program—placement tests, progress reports, vocational aptitude tests, basic vocational materials, selected material in the comprehensive courses, student conferences, adjustments for individual differences, election privileges, and comprehensive examinations—is a part of a plan designed to *guide* students.

UPPER DIVISION COOPERATION

While the necessary correlation and unification is attempted at the University College Office, throughout the University College period students consult Upper Division deans and department heads to discuss future work. During the last month of each school semester these informal conferences are supplemented by a scheduled formal conference at which each student fills out a pre-registration card for his prospective Upper Division work.

UNIVERSITY COLLEGE COUNSELORS

The University College Counselors do not assume the responsibility that every student himself must take, but they help in every way possible as he assumes a greater and greater share of responsibility in his University education. The counselors are located in the University College Office.

Every spring the University is privileged to give placement tests to all seniors in every high school of the state. Since many high schools are also trying to acquaint the student with the common body of knowledge so needed by all, their records along with the placement tests results indicate the variation that may be made in the general program.

A student who has had three or four years of preparatory school study in any one of the subject areas of the comprehensive courses, and his placement tests or progress tests indicate superior knowledge and understanding at this level may consult one of the counselors for subsequent needed program adjustment.

THE ASSOCIATE OF ARTS CERTIFICATE

The Associate of Arts Certificate is awarded in recognition of the successful completion of two years of planned work at the University of Florida. In specific detail, one must pass at least sixty-four semester hours including pre-professional work and the comprehensive courses that make up the core program.

PROGRAMS OF STUDY

NORMAL PROGRAM

Freshman Year	Hours
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Reading, Speaking and Writing: Freshman English	8
4.—Logic and Mathematics	6
5.—Departmental Electives	2-6
Military Science; Physical Fitness	2
	30-34

Sophomore Year	Hours
1.—The Humanities	8
2.—Biological Science	6
3.—Departmental Electives	16-20
Military Science; Physical Fitness	2
	30-34

At least sixty-four semester hours, which may include four hours of Military Science, are required to complete the Lower Division.

AGRICULTURE

The program for freshman and sophomores expecting to earn a degree in the College of Agriculture should be:

a) For students intending to major in Agricultural Chemistry—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—C-5, The Humanities	8
2.—C-3, Reading Speaking and Writing: Freshman English	8	2.—C-6, Biological Science	6
3.—*MS. 105-106, Basic Mathematics	8	3.—C-41, Practical Logic	3
4.—**CY. 217-218, General Chemistry and Qualitative Analysis	8	4.—EH. 133, Effective Writing	3
5.—Military Science; Physical Fitness	2	5.—CY. 331, Introductory Quantitative Analysis	4
		6.—Approved Electives	6
		7.—Military Science; Physical Fitness	2
	34		32

*Students not qualified for MS. 105-106 will take C-42 and C-41 during the freshman year and MS. 105-106 in the sophomore year.

**Students not qualified for CY. 217-218 will take CY. 121 and CY. 122 the Freshman year; CY. 123 the Sophomore year.

b) For students intending to major in Agricultural Economics—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—CY. 109-110, Elements of Chemistry	6
2.—C-6, Biological Science or BTY. 101-102	6	2.—ATG. 211, Elementary Accounting	3
3.—C-3, Reading, Speaking and Writing: Freshman English	8	3.—C-5, The Humanities	8
4.—C-4, or MS. 105-106, Basic Mathematics*	8	4.—AS. 201, Principles of Agricultural Economics	3
5.—Military Science; Physical Fitness	2	5.—ES. 201, Basic Economics	3
		6.—Electives in Agriculture or Basic Sciences	5-11
		7.—Military Science; Physical Fitness	2
	32		30-36

*For students whose background in high school mathematics is weak, the following courses are suggested as substitutes for those indicated: C-42, MS 325 and MS 327. Students with an adequate high school mathematical background may substitute MS 325 and MS 327.

c) For students intending to major in Agricultural Education—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—C-41, Practical Logic	3
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-42, Fundamental Mathematics	3
3.—C-6, Biological Science	6	3.—C-5, The Humanities	8
4.—AY. 221, General Field Crops	3	4.—BTY. 101.102, General Botany	6
5.—PY. 201, Fundamentals in Poultry Production	3	5.—CY. 109-110, Elements of Chemistry	6
6.—Military Science; Physical Fitness	2	6.—DY. 211, Principles of Dairying	3
		7.—VC. 212, Vegetable Gardening	3
		8.—Military Science; Physical Fitness	2
	30		34

d) For students intending to major in Agricultural Engineering, Agronomy*, Botany, General Agriculture*, Food Technology & Nutrition**, and Soils—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-6, Biological Science and/or BTY. 101-102	6-12	1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-4, Logic and Mathematics	6
3.—CY. 121-122, General Chemistry	8	3.—C-5, The Humanities	8
4.—Electives in Agriculture or Basic Sciences	0-6	4.—Electives in Agriculture or Basic Sciences	6-12
5.—Military Science; Physical Fitness	2	5.—Military Science; Physical Fitness	2
	30-36		30-36

*Students planning to major in Agronomy or General Agriculture are required to take BTY. 101-102 (prerequisites for Plant Pathology).

**Students qualified should take MS. 105-106.

e) For students majoring in Animal Husbandry and Nutrition—

Freshman Year	Hours	Sophomore Year	Hours
1.—BLY. 181, General Zoology	4	1.—C-1, American Institutions	8
2.—BTY. 101, General Botany	3	2.—C-4, Logic and Mathematics	6
3.—C-3, Reading, Speaking and Writing: Freshman English	8	3.—C-5, The Humanities	8
4.—CY. 121-122, General Chemistry	8	4.—DY. 211, Introduction to Dairy Science	3
5.—AL. 309, Agr. Eng. Course*	6	5.—AY. 324, Forage and Cover Crops	3

6.—Electives in Agriculture or Basic Sciences**	0-6
7.—Military Science; Physical Fitness	2
	31-37

6.—Electives in Agriculture or Basic Sciencss**	3-6
7.—Military Science; Physical Fitness	2
	33-36

*One of the following is suggested: AG. 301, AG. 302, AG. 306 or AG. 401.
**A conference is advised with the Head of Department of Animal Husbandry and Nutrition for recommendation on electives to take.

f) For students intending to major in Bacteriology (Microbiology) or Plant Pathology—

Freshman Year	Hours
1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8
3.—C-6, Biological Science and BLY. 161-162, Biology Laboratory or BTY. 101-102, General Botany	6-10
4.—**MS. 105-106, Basic Mathematics	8
5.—Military Science; Physical Fitness	2
	32-36

Sophomore Year	Hours
1.—C-5, The Humanities	8
2.—FH. or GN. 133-134, Language	6
3.—PS. 201-202, General Physics	8
4.—CY. 121-122, General Chemistry or CY. 217-218, General Chemistry and Qualitative Analysis	8
5.—Electives	0-4
6.—Military Science; Physical Fitness	2
	32-36

*For students majoring in Plant Pathology the requirement is BTY. 101-102, General Botany.
**Students not qualified for MS. 105-106 will take C-4 first.

g) For students majoring in Dairy Husbandry—

Freshman Year	Hours
1.—BTY. 101, General Botany	3
2.—BLY. 181, General Zoology	4
3.—C-3, Reading, Speaking and Writing: Freshman English	8
4.—CY. 121-122, General Chemistry	8
5.—DY. 211, Introduction to Dairy Science	3
6.—Electives in Agriculture or Basic Science	4
7.—Military Science; Physical Fitness	2
	32

Sophomore Year	Hours
1.—C-1, American Institutions	8
2.—C-4, Logic and Mathematics	6
3.—C-5, The Humanities	8
4.—CY. 362-363, Organic Chemistry	5
5.—AY. 324, Forage & Cover Crops	3
6.—Military Science; Physical Fitness	2
	32

Under certain circumstances students may take ACY 208 instead of CY 362-363.

h) For students majoring in Dairy Manufactures—

Freshman Year	Hours
1.—C-6, Biological Science	6
2.—C-3, Reading, Speaking and Writing: Freshman English	8
3.—CY. 121-122, General Chemistry	8
4.—DY. 211, Introduction to Dairy Science	3
5.—Electives in Agriculture or Basic Science	5
6.—Military Science; Physical Fitness	2
	32

Sophomore Year	Hours
1.—C-1, American Institutions	8
2.—C-4, Logic and Mathematics	6
3.—C-5, The Humanities	8
4.—Electives in Agriculture or Basic Science	8
5.—Military Science; Physical Fitness	2
	32

i) For students intending to major in Entomology there are two core curricula which are indicated as Curriculum A and Curriculum B. The student should refer also to the Upper Division requirements for these two curricula. A conference with the Head of the Department of Entomology is advised.

CURRICULUM A

Freshman Year	Hours
1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8
3.—C-6, Bioloical Science	6
4.—*CY. 121-122, General Chemistry or CY. 109-110, Elements of Chemistry	6-8
5.—Military Science; Physical Fitness	2
6.—Electives	2
	32-34

Sophomore Year	Hours
1.—C-41, Practical Logic	3
2.—C-42, Fundamental Mathematics	3
3.—C-5, The Humanities	8
4.—EY. 203, Economic Entomology or EY. 307, General Entomology	3
5.—Military Science; Physical Fitness	2
6.—Electives	13
	32

CURRICULUM B

Freshman Year	Hours
1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8

Sophomore Year	Hours
1.—C-41, Practical Logic	3
2.—C-42, Fundamental Mathematics	3
3.—C-5, The Humanities	8

3.—C-6, Biological Science	6
4.—BLY. 161-162, Biology Laboratory	4
5.—BTY. 101-102, General Botany	6
6.—Military Science; Physical Fitness	2
	34

4.—*CY. 121-122, General Chemistry or CY. 109-110, Elements of Chemistry	6-8
5.—EY. 307, General Entomology	3
6.—Military Science; Physical Fitness	2
7.—Electives	7
	32-34

*Students desiring a terminal course in chemistry should register for CY. 109-110. Those students requiring additional chemistry in order to complete their training should register for CY. 121-122.

j) For students intending to major in Fruit Crops—Citrus Production or Fruit Packinghouse Management and Marketing*—

Freshman Year	Hours
1.—Bty. 101-102, General Botany	6
2.—CY. 121-122, General Chemistry	8
3.—C-1, American Institutions	8
4.—C-3, Reading, Speaking and Writing: Freshman English	8
5.—Military Science; Physical Fitness	2
	32

Sophomore Year	Hours
1.—Acy. 208, Agricultural Biochemistry	3
2.—Fc. 201, Principles of Horticulture	3
3.—Bty. 211, Elementary Plant Physiology	4
4.—Ey. 203, Economic Entomology	3
5.—C-4, Logic and Mathematics	6
6.—C-5, The Humanities	8
7.—Approved Electives	6
8.—Military Science; Physical Fitness	2
	35

*Students electing Fruit Packinghouse Management and Marketing will take Eh. 255 in their sophomore year.

k) For students intending to major in Fruit Crops Research—

Freshman Year	Hours
1.—Cy. 121-122, General Chemistry	8
2.—Ms. 105-106, Basic Mathematics	8
3.—Bty. 101-102, General Botany	6
4.—C-1, American Institutions	8
5.—Ey. 203, Economic Entomology	3
6.—Ag. 301, Drainage and Irrigation	3
	36

Sophomore Year	Hours
1.—Cy. 123, Qualitative Analysis	3
2.—Cy. 331, Introductory Quantitative Analysis	4
3.—Ps. 201-202, General Physics	6
4.—Ps. 207-208, Laboratory for Ps. 201-202	2
5.—C-5, The Humanities	8
6.—As. 201, Principles of Agricultural Economics	3
7.—Fc. 201, Principles of Horticulture	3
8.—C-3, Reading, Speaking and Writing: Freshman English	8
	37

l) For students intending to major in Ornamental Horticulture—

Freshman Year	Hours
1.—C-1, American Institutions	8
2.—CY. 121-122, General Chemistry	8
3.—C-3, Reading, Speaking, Writing: Freshman English	8
4.—Ms 105* Basic Mathematics	4
5.—Electives in Agriculture or Basic Sciences	4
6.—Military Science; Physical Fitness	2
	34

Sophomore Year	Hours
1.—C-5, The Humanities	8
2.—C-41, Logic	3
3.—Bty. 101-102, General Botany	6
4.—Cy 123, Qualitative Analysis	3
5.—Ps 201-207, General Physics	4
6.—OH. 201, Introduction to Ornamental Horticulture	3
7.—OH. 217, Plant Propagation	3
8.—Approved Electives	2
9.—Military Science; Physical Fitness	2
	34

*Students not qualified for Ms 105 will take C-42 during freshman year.

m) For students intending to major in Poultry Husbandry—

Freshman Year	Hours
1.—C-3, Reading, Speaking and Writing: Freshman English	8
2.—CY. 121-122, General Chemistry	8
3.—BTY. 101, General Botany	3
4.—BLY. 181, General Zoology	4
5.—Electives in Agriculture or Basic Sciences	9
6.—Military Science; Physical Fitness	2
	34

Sophomore Year	Hours
1.—C-1, American Institutions	8
2.—*C-4, Logic and Mathematics	6
3.—C-5, The Humanities	8
4.—ACY. 208, Agricultural Biochemistry	3
5.—PY. 201, Fundamentals in Poultry Production	3
6.—Electives in Agriculture or Basic Sciences	4
7.—Military Science; Physical Fitness	2
	34

*Students qualified should take MS. 105.

n) For students intending to major in Vegetable Crops—

Freshman Year	Hours
1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking, Writing: Freshman English	8

Sophomore Year	Hours
1.—C-5, Humanities	8
2.—BTY-101-102, General Botany	6
3.—ACY-208, Agricultural Biochemistry	3

3.—CY. 121-122, General Chemistry	8
4.—C-4 or C-42 and MS-325, Mathematics	6
5.—Elective in Agriculture or Basic Science*	0-3
6.—Military Science; Physical Fitness	2
	32-35

4.—VC. 201, Principles of Horticulture	3
5.—VC. 202, Vegetable Gardening	3
6.—Electives in Agriculture and Basic Science*	9
7.—Military Science; Physical Fitness	2
	34

*Suggested Electives include: C-2, AL-309, AS-201, AY-221, CY-123, CY-211, OH-217, PS-110, PY-201.

Some variations from these programs are desirable in the different curricula of the College. The curriculum of the department in which the student intends to major should be consulted for these details. At least 64 academic hours which may include 4 hours of Military Science are required to complete the Lower Division; additional approved electives taken during the first two years may reduce the number of hours required for an Upper Division degree.

For desirable electives in Agriculture, students should consult the head of the department in which they intend to major. These electives during the first two years should be distributed so as to give some acquaintance with the different phases of Agriculture, and are limited to a single course in any one department. It is required that all students graduating in Agriculture take at least one course in each of the following departments: Agricultural Economics, Soils, either Agronomy, Food Technology and Nutrition, Fruit Crops, Ornamental Horticulture or Vegetable Crops, and either Animal Husbandry and Nutrition, Dairy Science or Poultry Husbandry. All such students, except those majoring in Agricultural Chemistry and Bacteriology, shall also take at least one course in Agricultural Engineering and in Entomology. Courses suitable for election in the freshman year are AG. 306, AL. 309, AY. 221, DY. 211, EY. 203, FY. 313, and PY. 201. In the sophomore years these may also be elected, and in addition the following: AG. 301, AS. 201, AS. 306, AY. 324, CL. 223, FC. or VC. 201, OH. 201, PT. 321, SLS. 301, and SLS. 302.

ARCHITECTURE AND FINE ARTS

The University College student who plans to earn a degree in the College of Architecture and Fine Arts has one of the following basic programs:

A.—For the degree in Architecture or Building Construction—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—Reading, Speaking and Writing: Freshman English	8	2.—Biological Science	6
*3.—MS. 105-6	8	**3.—PS. 201-2	6
4.—AE. 101-2	6	4.—AE. 203-4	6
5.—Military Science or Elective	2	5.—AE. 205-6	6
6.—Physical Fitness	0	6.—Military Science or Elective	2
	32	7.—Physical Fitness	0
			34

B.—For the degree in Landscape Architecture—

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—CL. 223	3
*4.—MS. 105	4	4.—CY. 109	3
5.—AE. 101-2	6	5.—AE. 203-4	6
6.—Military Science or Elective	2	6.—AE. 205	3
7.—Physical Fitness	0	7.—Military Science or Elective	2
	34	8.—Physical Fitness	0
			34

*Students not qualified for MS. 105-6 will take C-42 first.
**Students not qualified for PS. 201-2 will take C-22 first.

C.—For the degree in Interior Design—

Freshman Year	Credits
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Reading, Speaking and Writing: Freshman English	8
4.—Logic and Mathematics	6
5.—AE. 101-2	6
6.—Military Science or Elective	2
7.—Physical Fitness	0
	36

Sophomore Year	Credits
1.—The Humanities	8
2.—Biological Science	6
3.—AE. 203-4	6
4.—AE. 205	3
5.—Approved Elective	3
6.—Military Science or Elective	2
7.—Physical Fitness	0
	28

D.—For the degree in Painting and Drawing, Commercial Art, Crafts, or History of Arts.—

Freshman Year	Credits
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Reading, Speaking and Writing: Freshman English	8
4.—Logic and Mathematics	6
5.—ART 121	3
6.—ART 123	3
7.—Military Science or Elective	2
8.—Physical Fitness	0
	36

Sophomore Year	Credits
1.—The Humanities	8
2.—Biological Science	6
3.—ART 124	3
4.—ART 222	3
5.—ART 225-6	6
6.—Military Science or Elective	2
7.—Physical Fitness	0
	28

E.—For the degree in Costume Design—

Freshman Year	Credits
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Reading, Speaking and Writing: Freshman English	8
4.—Logic and Mathematics	6
5.—ART 121	3
6.—ART 123	3
7.—Military Science or Elective	2
8.—Physical Fitness	0
	36

Sophomore Year	Credits
1.—The Humanities	8
2.—Biological Science	6
3.—ART 124	3
4.—ART 222	3
5.—ART 290	3
6.—Approved Elective	3
7.—Military Science or Elective	2
8.—Physical Fitness	0
	28

F.—For the degree in Music—

Freshman Year	Credits
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Freshman English	8
4.—Logic and Mathematics	6
5.—Military Science: Physical Fitness	2
6.—Applied Music	2
7.—Ensemble	2
	34

Sophomore Year	Credits
1.—The Humanities	8
2.—Biological Science	6
3.—Military Science: Physical Fitness	2
4.—EDF. 225	3
5.—EDF. 245	3
6.—MSC. 101-102	6
7.—Applied Music in Courses above 100	4
8.—Ensemble	2
	34

NOTE: Before a student may be admitted to a Department major program in Music in the College of Architecture and Fine Arts (his junior year), he must pass a proficiency examination in Piano.

ARTS AND SCIENCES

A student who plans to earn a 4-year degree in the College of Arts and Sciences should secure credit in all of the comprehensive areas as indicated by the University College. Electives in the first two years should be taken in introductory courses in possible major fields and in foreign languages. Students who have selected a major should limit their University College electives in the major to permit taking introductory and intermediate courses in other liberal arts areas.

For further information concerning special programs of instruction and the details of degree requirements the student is referred to the regular University Catalog.

PRE-MEDICAL OR PRE-DENTAL STUDENTS

Medical schools the country over require for admission usually a minimum of three years (90 semester hours) and dental schools require a minimum of two years (60 semester hours). The subjects which most catalogs list are:

Pre-medical	Pre-dental
6 semester hours of English	6 semester hours of English
8 semester hours of Inorganic Chemistry	6 semester hours of Biology
8 semester hours of Organic Chemistry	6 semester hours of Physics
8 semester hours of Physics	8 semester hours of Inorganic Chemistry
8 semester hours of Biology	4 semester hours of Organic Chemistry
6 semester hours of French or German	30 semester hours of Electives
40-50 semester hours of Electives	

These specific subjects may be taken as a part of a regular University College program. Catalogs of medical schools are kept at the University College Office and at the Pre-Professional Counselling Office (12-B Flint Hall).

Not all applicants who meet the minimum requirements are accepted. The ratio varies from 1 in 5 to 1 in 30. Excellent grades in the preparatory subjects are essential.

A complete statement of the requirements of the University of Florida Medical College is to be found in another part of this catalog.

BUSINESS ADMINISTRATION

To enter the College of Business Administration, students are required to complete the curriculum below or the equivalent thereof in each of the courses or areas of knowledge listed including the following:

ES. 201-202.—Basic Economics
ATG. 211-212.—Elementary Accounting
ES. 203.—Elementary Statistics
MS. 208.—Business Mathematics

Freshman Year

First semester	Hours	Second Semester	Hours
1.—American Institutions	4	1.—American Institutions	4
*2.—The Physical Sciences	3	*2.—The Physical Sciences	3
*3.—Logic or Mathematics	3	*3.—Logic or Mathematics	3
4.—Reading, Speaking and Writing: Freshman English	4	4.—Reading, Speaking and Writing: Freshman English	4
5.—Approved Electives	3	5.—Approved Electives	3
Military Science; Physical Fitness	1	Military Science; Physical Fitness	1
	15-18		15-18

Sophomore Year

1.—Accounting	3	1.—Accounting	3
2.—Economics	3	2.—Economics	3
3.—The Humanities	4	3.—The Humanities	4
4.—Biological Science	3	4.—Biological Science	3
5.—Satistics or MS 208	3-4	5.—MS 208 or Statistics	3-4
Military Science; Physical Fitness	1	Military Science; Physical Fitness	1
	17-18		17-18

*A student who has had three or more years of mathematics and science in preparatory school and whose standings on the placement tests indicate superior knowledge and understanding at these levels may substitute one of the introductory basic sciences for the general Physical Science course (C-2) and Basic Mathematics for Logic and Fundamental Mathematics.

At least sixty-four semester hours, which may include four hours of Military Science, are required to complete the Lower Division.

COURSES OFFERED BY THE COLLEGE OF BUSINESS ADMINISTRATION AVAILABLE TO STUDENTS IN THE UNIVERSITY COLLEGE

The following courses offered by the College of Business Administration may be taken by students in the University College: ATG. 211-212, Elementary Accounting; ATG. 214, Federal Income Taxes for Individuals; ES. 203, Elementary Statistics; ES. 201-202, Basic Economics; ES. 208, Economic History of the United States; ES. 210, Machine Technology in American Life; ES. 246, Consumer Economics; ES. 296, Industry and Trade of Latin America; FI. 260, Fundamentals of Insurance; MGT. 101, Introduction to Business; MGT. 204, Business Ethics; MGT. 271, Principles of Management; MKG. 231, Principles of Marketing; MKG. 233, Salesmanship; RE. 291, Real Estate Fundamentals; and RE. 295, Housing and Home Ownership.

It is anticipated that some students who do not plan a four-year program will elect to take many of these courses or to arrange a program of two years or less in length in which many of these courses would be included. Also some students not headed for the College of Business Administration may wish to elect one or more of these courses.

EDUCATION

University College students working toward a degree in the College of Education should pursue one of the following programs:

BASIC PROGRAM

(Except Agricultural Education)

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—Logic or Mathematics	3
4.—Logic or Mathematics	3	4.—Military Science or Electives	2
5.—Military Science or Electives	2	5.—Electives (approved)	12
6.—Electives (from list below)	6-8	6.—Physical Fitness	0
7.—Physical Fitness	0		31
	33-35		

Electives:

Art Education: EDF 245-225; ART 101, 102, 103, 104, 206; SCA 253.

Elementary Education: EDF 245-225; MSC 161 (Prerequisite: MSC 160 or pass music skills test); PHA 361; SCA 253.

Industrial Arts Education: EDF 245-225; IN 102.

Music Education: EDF 245-225; MSC 101, 102; 4 credits in ensemble, 4 credits in applied music.

Physical Education for Men: EDF 245-225; PHA 251, 291, 283, 284, 287.

Physical Education for Women: EDF 245-225; PHA 251, 291, 252, 253, 254, 255, 256, 257, 258.

Secondary Education: EDF 245-225; electives should include 9 hours of basic courses in the teaching field and an approved elective in the Human Adjustment area.

In Secondary Education and Industrial Arts Education, 3 hours in the Human Adjustment area, other than C-41, are required. These electives may be taken either in the University College or in the College of Education.

BASIC PROGRAM FOR AGRICULTURAL EDUCATION

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—Practical Logic	3
2.—Reading, Speaking and Writing: Freshman English	8	2.—Fundamental Mathematics	3
3.—Biological Science	6	3.—The Humanities	8
		4.—BTY. 101-102, General Botany	6

4.—AY. 221, General Field Crops	3
5.—PY. 201, Fundamentals in Poultry Production	3
6.—Military Science; Physical Fitness	2
	30

5.—CY. 109-110, Elements of Chemistry	6
6.—DY. 211, Principles of Dairying	3
7.—VC. 202, Vegetable Gardening	3
8.—Military Science; Physical Fitness	2
	34

ENGINEERING

The program for the first and second year students expecting to earn a degree in the College of Engineering is as follows:

First Semester	Credits
1.—C-11, American Institutions	4
*2.—C-21, The Physical Sciences	3
3.—C-31, Reading, Speaking and Writing: Freshman English	4
*4.—C-42, Fundamental Mathematics	3
5.—Military Science	1
6.—PL. 101, Physical Fitness	0
	15

Second Semester	Credits
1.—C-12, American Institutions	4
*2.—C-22, The Physical Sciences	3
3.—C-32, Reading, Speaking and Writing: Freshman English	4
*4.—C-41, Practical Logic	3
5.—MS. 105, Basic Mathematics	4
6.—Military Science	1
7.—PL. 102, Physical Fitness	0
	19

Third Semester	Credits
1.—MS. 106, Basic Mathematics	4
2.—CY. 217, General Chemistry and Qualitative Analysis	4
3.—C-51, The Humanities	4
**4.—EGR. 181, Engineering Drawing	3
5.—Military Science	1
6.—PL. 103, Physical Fitness	0
	16

Fourth Semester	Credits
1.—MS. 353, Differential Calculus	4
2.—CY. 218, General Chemistry and Qualitative Analysis	4
3.—C-52, The Humanities	4
**4.—EGR. 182, Descriptive Geometry	3
5.—Military Science	1
6.—PL. 104, Physical Fitness	0
	16

A student interested in the Florida Industries Cooperative Plan should contact the engineering department of his choice or the Dean's office for specific advice before registering for the first semester.

Students whose records in the University College indicate that they are qualified to take the professional courses in Engineering will be admitted to the College of Engineering.

FORESTRY

Students planning to enter the School of Forestry should complete the respective outline of courses listed in the regular University Catalog as required for the freshman and sophomore years for the Forestry curriculum of their choice.

Those students falling below a 2.0 grade average will be considered for admittance to the School of Forestry only after they have demonstrated the ability to satisfactorily carry on the professional courses in Forestry.

JOURNALISM AND COMMUNICATIONS

To enter the School of Journalism and Communications students are required to have completed the comprehensive courses required in University College and these pre-professional courses: COM. 118.—Survey of Communications; COM. 201.—Writing for Mass Communications; ES. 201.—Basic Economics; and ART 101.—Beginning Design. In addition to the above pre-professional courses, the Radio-TV majors must take SCH. 200.—Voice and Diction, and COM. 212.—Radio and Television Announcing. The Journalism, Public Relations, and Ad-

*In cases where students on the basis of superior placement test grades, are allowed to omit starred courses, they will need to take an equivalent amount of more advanced work in order to be eligible for admission to the College of Engineering at the end of the second year.

**Drawing equipment required for EGR 181, EGR 182, and subsequent courses costs approximately thirty dollars.

vertising majors must take SCH. 201.—Effective Speaking. All candidates must have a grade average of C or better and a working knowledge of typewriting.

LAW

Applicants for admission to the College of Law must have received before admission a four-year baccalaureate degree from a college or university of approved standing and a minimum score of 340 on the Law School Admission Test except as stated in the description of the College of Law in this Catalog.

Although no particular courses are prerequisites, a student preparing for admission to the College of Law should obtain a thorough mastery of the basic comprehensive courses and should take also at least an academic year's work in each of the following general fields: Accounting, Economics, English, American History, English History and Political Science. Since concepts expressed in words are tools of the legal profession, it is essential that a student be able to read rapidly and meaningfully and to write clearly and concisely. Courses requiring the rapid assimilation and digestion of written materials and courses in expository writing therefore are recommended.

NURSING

The program for freshmen and sophomores planning to earn a degree in the College of Nursing should be:

Freshman Year	Hours
C-1, American Institutions	8
C-21, The Physical Sciences	3
C-3, Reading, Speaking and Writing	8
C-4, Logic and Mathematics	6
C-61, Biological Science	3
NSG-101, Introduction to Nursing	3
NSG-111, Introduction to Nursing Functions	3
Physical Education	0
	34

Sophomore Year	Hours
C-5, The Humanities	8
C-22, The Physical Sciences	3
FAM-213, The Child in the Home	3
BCY-300, Bacteria in Everyday Life	3
NSG-221, Nursing Skills Laboratory	4
C-62, Biological Science	3
FAM-150, Nutritive Requirements for Health	2
NSG-230, Medical & Surgical Nursing	3
NSG-231, Medical & Surgical Nursing Laboratory	5
Physical Education	0
	34

PHARMACY

In keeping with the requirements of the American Council on Pharmaceutical Education, all students expecting to earn the degree of B.S. in Pharmacy must be enrolled in one or more Pharmacy courses for a minimum of three academic years or a total of twenty-seven months. This regulation applies regardless of the number of studies completed in other fields. Upon enrolling in Pharmacy courses for the first time students must sign the register in the office of the Dean of the College of Pharmacy. Students are advised to pursue the following program:

Freshman Year and Summer Session	Credits
C-11-12, American Institutions	8
C-31, 32, Freshman English	8
C-41, Practical Logic	3
C-42, Fundamental Mathematics	3
C-51, The Humanities	4
C-61, Biological Science	3
CY. 121-2, General Chemistry	8
PHY. 106, Pharmaceutical Calculations	2
Military Science; Physical Fitness	2
Total	41

Sophomore Year	Credits
C-52, The Humanities	4
C-62, Biological Science	3
PS. 201-2, General Physics	6
PS. 207-8, General Physics Laboratory	2
PGY. 221-2, Practical Pharmacognosy	6
PHY. 223-4, Galenical Pharmacy	6
CY. 123, Qualitative Analysis	3
CY. 331, Quantitative Analysis	4
Military Science; Physical Fitness	2
Total	36

Only students having an average of C or higher will be admitted to the College of Pharmacy and/or pharmacy courses in the Upper Division. In addition, all pre-pharmacy students must have grades of C or higher in each of the following courses: C-42, CY. 121, CY. 122, PGY. 221, PGY. 222, PHY. 106, PHY. 223, and PHY. 224.

PHYSICAL EDUCATION AND HEALTH

University College students expecting to earn a degree in the College of Physical Education and Health should pursue one of the following programs:

A.—For men intending to major in Physical Education—

Freshman Year	Credits	Sophomore Year	Credits
C-11-12—American Institutions	8	C-21-22—The Physical Sciences	6
C-31-32—Reading, Speaking and Writing	8	C-51-52—The Humanities	8
C-41-42—Logic and Mathematics	6	C-61-62—Biological Science	6
PHA. 284—Team Games for Men	2	PHA. 251—Square and Social Dance	2
PHA. 287—Gymnastics for Men	2	PHA. 283—Track and Baseball	2
Approved Electives	4	EDF. 225—Children and Culture	3
Military Science; Physical Fitness	2	EDF. 245—Aspects of Human Growth and Development	3
	32	Military Science; Physical Fitness	2
			32

B.—For women intending to major in Physical Education—

Freshman Year	Credits	Sophomore Year	Credits
C-11-12—American Institutions	8	C-21-22—The Physical Sciences	6
C-31-32—Reading, Speaking and Writing	8	C-51-52—The Humanities	8
C-41-42—Logic and Mathematics	6	C-61-62—Biological Science	6
PHA. 251—Square and Social Dance	2	PHA. 252—Modern Dance	1
PHA. 253—Team Sports for Women	2	PHA. 254—Team Sports for Women	2
PHA. 255—Individual and Dual Sports for Women	2	PHA. 256—Swimmin and Diving for Women	1
PHA. 257—Gymnastics for Women	1	PHA. 258—Tennis and Golf for Women	2
Approved Electives	3	EDF. 225—Children and Culture	3
Physical Fitness	0	EDF. 245—Aspects of Human Growth and Development	3
	32	Physical Fitness	0
			32

C.—For men and women intending to major in Health Education—

Freshman Year	Credits	Sophomore Year	Credits
C-11-12.—American Institutions	8	C-51-52.—The Humanities	8
C-31-32.—Reading, Speaking and Writing	8	C-61-62.—Biological Science	6
C-41-42.—Logic and Mathematics	6	*CY. 121-122.—General Chemistry	8
EDF. 245.—Aspects of Human Growth and Development	3	SY. 201.—Sociological Foundation of Modern Life	3
PHA. 261.—Personal Hygiene	3	EDF. 225.—Children and Culture	3
Approved Electives	2	SY. 244.—Marriage and the Family	3
Military Science or Electives	2	Military Science or Electives	1
Physical Fitness	0	Physical Fitness	0
	32		32

*Students planning to major in Health Education must take CY 121-122. Students whose high school records and placement tests indicate satisfactory preparation may substitute CY. 121-122 for C-21-22. Others should take C-21, upon satisfactory completion of which they may enter CY. 121.

D.—For men and women intending to major in Recreation—

Freshman Year	Credits	Sophomore Year	Credits
C-11-12—American Institutions	8	C-21-22—The Physical Sciences	6
C-31-32—Reading, Speaking and Writing	8	C-51-52—The Humanities	8
C-41-42—Logic and Mathematics	6	C-61-62—Biological Science	6
PHA. 284—Team Games for Men or PHA. 253—Team Sports for Women	2	PHA. 251—Square and Social Dance	2
PHA. 255.—Individual and Dual Sports for Women	2-0	SY. 201—Socioloical Foundations of Modern Life	3
EDF. 245—Aspects of Human Growth and Development	3	PHA. 283—Track and Baseball or PHA. 258.—Tennis and Golf for Women	2

Military Science or Electives	3-5
Physical Fitness	0
	32

Military Science or Electives	5
Physical Fitness	0
	32

E.—For men and women intending to major in Physical Therapy—

Freshman Year	Credits
C-11-12—American Institutions	8
C-31-32—Reading, Speaking and Writing	8
C-41-42—Logic and Mathematics	6
C-61-62—Biological Science	6
BLY. 161-162—Biology Laboratory	4
Military Science or Electives	2
Physical Fitness	0
	34

Sophomore Year	Credits
*CY. 121-122—General Chemistry	8
C-51-52—The Humanities	8
PHA. 295—Introduction to Physical Therapy	2
PSY. 201—General Psychology	3
PSY. 205—Social Psychology or PSY. 202—Personality Development or PSY. 211—Psychological Measurement	3
Approved Electives	6
Military Science or Electives	2
Physical Fitness	0
	32

*Students planning to major in Physical Therapy must take CY. 121-122. Students whose high school records and placement tests indicate satisfactory preparation may substitute CY. 121-122 for C-21-22. Others should take C-21, upon satisfactory completion of which they may enter CY. 121.

SCHOOLS AND COLLEGES OF THE UPPER DIVISION

COLLEGE OF AGRICULTURE

The College of Agriculture is composed of three units, namely, 1. Instruction, 2. Research (Agricultural Experiment Station), and 3. Extension (Agricultural Extension Service). The Instructional Division (The College proper) is made up of departments in the College devoted to the various phases of technical and practical agricultural work. The work of these departments is closely related, and the aim of the College is to afford students the best possible training for service in agriculture.

The departments in the College are: Agricultural Chemistry (administered jointly with the College of Arts and Sciences), Agricultural Economics, Agricultural Education (administered jointly with the College of Education), Agricultural Engineering, Agronomy, Animal Husbandry and Nutrition, Bacteriology, Botany, Dairy Science, Entomology, Food Technology and Nutrition, Fruit Crops, Ornamental Horticulture, Plant Pathology, Poultry Husbandry, Soils, Vegetable Crops, and Veterinary Science.

COLLEGE OF ARCHITECTURE AND FINE ARTS

The College of Architecture and Fine Arts offers programs of study leading to appropriate undergraduate degrees in Architecture, Building Construction, Interior Design, Landscape Architecture, Painting and Drawing, Commercial Art, Crafts, Costume Design, History of Art, and Music. Programs at the graduate level are offered in Architecture, in Art, in Building Construction, and in Community Planning.

The College offers courses to students in other college of the University who wish to broaden their cultural background in the arts.

1958 SUMMER SESSION

During the 1958 Summer Session the College will offer a selected group of undergraduate courses in Architecture, Art, Building Construction, and Music, as well as graduate courses in Architecture, Art, and Building Construction.

TEACHERS' CERTIFICATES

The College of Architecture and Fine Arts offers courses leading to certification in Art and Music for teaching in the elementary and secondary schools in the State of Florida. Regulations describing certification of teachers are published by the State Department of Education and it is imperative that all students who expect to be certified familiarize themselves with these regulations. Applications for certificate should be made immediately after graduation, and should be addressed to the State Superintendent of Public Instruction.

DEGREES AND CURRICULA

For detailed information on admission, undergraduate degrees, graduate degrees, and programs of study for the various curricula, see the University Catalog.

COLLEGE OF ARTS AND SCIENCES

The subject matter fields regularly offered to students in the College of Arts and Sciences and the extent of these offerings is indicated in the table below:

Subject	Elective Work	Group Major	Major Dept.	MA. or MS.	Ph.D.
Anthropology	X	X	X	—	—
Art	X	X	X	Graduate work offered through College of Architecture and Fine Arts	
Astronomy	X	X	—	—	—
Bacteriology	X	X	X	Graduate work offered through College of Agriculture	
Biology	X	X	X	X	X
Botany	X	X	X	Graduate work offered through College of Agriculture	
Chemistry	X	X	X	X	X
Communications	X	Major and Graduate work offered in the School of Journalism and Communications			
Economics	X	X	X	Graduate work offered through College of Business Administration	
Education	X	Major and Graduate work offered through the College of Education.			
English	X	X	X	X	X
Family Life	X	X	—	—	—
French	X	X	X	X	—
Geography	X	X	X	X	X
Geology	X	X	X	X	—
German	X	X	X	X	—
Greek	X	X	X	—	—

History	X	X	X	X	X
Journalism	X	Major and Graduate work offered in the School of Journalism and Communications			
Latin	X	X	X	X	—
Library Science	X	X	—	—	—
Mathematics	X	X	X	X	X
Meteorology	X	—	—	—	—
Music	X	X	X	—	—
Philosophy	X	X	X	X	—
Physics	X	X	X	X	X
Political Science	X	X	X	X	X
Psychology	X	X	X	X	X
Religion	X	X	X	—	—
Russian	X	X	—	—	—
Sociology	X	X	X	X	X
Spanish	X	X	X	X	X
Speech	X	X	X	X	X
Zoology		See Biology listed above			

For information regarding details of these programs of study and degree requirements, the University catalog for 1958-59 should be consulted.

COLLEGE OF BUSINESS ADMINISTRATION

The summer session offerings of the College of Business Administration provide basic courses in the several curricula groupings, a selection of advanced courses to enable students to go ahead with a normal academic program and a selection of graduate courses.

A number of curricula leading to the degree of Bachelor of Science in Business Administration are offered. For complete information on the requirements for these curricula and for the graduate program, the University Catalog should be consulted.

COLLEGE OF EDUCATION

REQUIREMENTS FOR ADMISSION

For admission to the College of Education students will present a certificate of graduation from the University College, or equivalent, and have the approval of the Admissions Committee of the College of Education. (See General Catalog for detailed requirements.)

UNDERGRADUATE PROGRAMS

Students who are preparing to teach have the opportunity of specializing in the following teaching areas: elementary education, business education, core, English, French, Latin, mathematics, science, social studies, Spanish, vocational agriculture, industrial arts, art, education for exceptional children, music, and physical education. In addition, second teaching fields may be chosen from among: driver education, English, health, journalism, library service, separate fields of science, separate fields of social studies, speech. (See General Catalog for curricular. For further information, consult the Undergraduate Counseling Office, Norman 140.)

GRADUATE PROGRAMS

Graduate work in Education offers an opportunity for teachers to specialize in such areas as foundations of education (educational psychology, history and philosophy of education, human growth and development), elementary education, secondary education, curriculum and instruction, agricultural education, business education, industrial arts education, educational administration, supervision, audio-visual education, guidance, junior college education, teacher education, educational research, rehabilitation counseling, and education for the exceptional child. (See General Catalog for requirements.)

NOTE: Orientation Meeting for *all* graduate students in Education, Thursday, June 19, 7:00 P.M., in Norman Auditorium. This meeting will be devoted to a discussion of policies and programs for graduate students in the College of Education.

CERTIFICATION OF TEACHERS

The curricula in the College of Education include State certification requirements. Each student should consult his counselor to plan a sequence of courses to meet requirements for his degree and for certification.

For further information concerning the certification of teachers, write to the State Department of Education, Tallahassee, Florida, requesting *State Board Regulations Relating to Florida Requirements for Teacher Education and Certification*, Revised September 11, 1956.

EDUCATIONAL PLACEMENT OFFICE

The Educational Placement Office serves both former students of the University and public school officials, without charge. The Office keeps up-to-date records on registrants for positions and a current list of educational administration and teaching vacancies. Persons who wish this service should communicate with the Educational Placement Office, Norman 140.

THE P. K. YONGE LABORATORY SCHOOL

The summer term of the Laboratory School will extend from June 17 through July 25. Children of Summer Session students and all others are eligible for enrollment. Classes from the kindergarten through the sixth grade will be held. High school units in Spanish, algebra, plane geometry, and homemaking may be earned. Fees of $2 for University registration and a nominal fee for expendable materials will be charged. An additional fee is requested for those who register for the swimming program.

Parents will register pupils Monday, June 16, 3:00 to 5:00 p.m. in the P. K. Yonge administration building.

Application for admission should be made at the administrative office of the P. K. Yonge School as soon as possible, since the number who may be admitted is limited. Information regarding transcripts and transfer of credit for high school students is provided upon application.

EDUCATION CLASS IN EXCEPTIONAL CHILD EDUCATION

Through the cooperation of the Alachua County public schools and the P. K. Yonge Laboratory School, a demonstration class is provided for teachers in-

terested in observing work with slow learning children. Observations may be scheduled at Room 120, Norman Hall.

COLLEGE OF ENGINEERING

UNDERGRADUATE PROGRAMS

Students who contemplate registration in the College of Engineering and those who are already registered in this college should confer about their schedules with the department heads and the dean as soon as possible.

The College of Engineering is offering several courses during the Summer Session in various departments so that students may graduate in a minimum time. Many other courses included in the engineering curricula, such as mathematics and physics, are also available. During the summer months the engineering student may also take subjects to meet elective requirements.

A student in the College of Engineering desiring to elect the Nuclear Option must confer with his department head before arranging his registration.

Students entering the University for the first time may find it to their advantage to enroll in mathematics and one of the following: Freshman English, American Institutions or General Chemistry. Students who have completed one year at the University may take courses in calculus and physics. Statics, dynamics, or strength of materials is suggested for those students who have completed calculus and physics. Elective subjects in mathematics, physics and the humanities are recommended to all students.

GRADUATE PROGRAMS

The graduate programs offered by the College of Engineering are continued during the summer in order to allow students already enrolled to complete their graduate work in a minimum length of time.

FORESTRY

Courses in Forestry are offered during the Summer Session. The required Summer Camp should be taken between the second and third year's work provided the necessary prerequisites have been completed. Students who contemplate registration in the School of Forestry should consult the University Catalog for courses which are prerequisites or are required in the Forestry curriculum.

SCHOOL OF JOURNALISM AND COMMUNICATIONS

A UNIT OF THE COLLEGE OF ARTS AND SCIENCES

The curricula in the School of Journalism and Communications lead to the degree Bachelor of Science in Journalism or Bachelor of Science in Communications.

The programs provide students with a broad background in liberal arts and sciences—literature, economics, history, political science, sociology, psychology—which are vital aspects of contemporary life and essential to those entering professional careers in printed media or audio-visual media of communications.

The general plan of education in this School is arranged so that the student

spends about three-fourths of his time on general background courses. The remaining fourth involves the acquisition and practice of professional techniques in relation to this background knowledge.

Students entering the School of Journalism must choose one of the programs of study.

Those majoring in the Editorial and Public Relations fields will take the Journalism program and earn the BSJ degree. Two degrees are offered in the Advertising program: those interested in printed media will earn the BSJ degree, and those specializing in audio-visual media will earn the BSCOM degree. Students interested in Radio-TV will register for the Communications program and earn the BSCOM degree.

COLLEGE OF LAW

1. The beginning courses in Law are not offered in the Summer Session hence students are not admitted in June unless they have completed satisfactorily at least one semester of work in an accredited law school.

2. A student wishing to transfer from another accredited law school who, at the time of beginning his study of law, qualified for admission to this College under the stated requirements for beginning students (other than the Law School Admission Test) and who has maintained a scholastic average of C or higher on all previous law school work undertaken, may apply for admission with advanced standing. Courses completed with a grade of C or higher in other accredited law schools will be acceptable for credit up to but not exceeding a total of thirty hours.

3. Applicants for admission to the College of Law must have received a 4-year baccalaureate degree from a college or university of approved standing and a minimum score of 340 on the Law School Admission Test. If the Test is retaken a minimum score of 375 is required.

   Under existing legislation veterans who present honorable discharges which show not less than ninety consecutive days of active service in the U. S. Army, Air Force, Coast Guard, Navy or Marine Corps may enter after they have completed 94 hours of college work meeting the standards of the Association of American Law Schools. A veteran who has not received a degree must have made an average of C or higher in all work undertaken prior to entrance in the College of Law and a minimum score of 340 on the Law School Admission Test. If the Test is retaken a minimum score of 375 is required. For information on admissions to the College of Law with advanced standing see the section of the catalog headed College of Law.

COLLEGE OF NURSING

The College of Nursing has a four-year basic program leading to the degree Bachelor of Science in Nursing. Students in this program are required to take all of the comprehensive courses during their first two years along with beginning courses in nursing. The junior and senior years will consist largely of nursing courses, plus some recommended electives in the junior year. Graduate nurses who are interested in obtaining the B.S.N. will take the same general education courses

as basic students as well as advanced clinical courses. Further details about the program may be obtained from the College of Nursing.

During the 1958 Summer Session there will be no courses offered by the College of Nursing.

COLLEGE OF PHARMACY

The Summer Session offerings of the College of Pharmacy, a unit in the J. Hillis Miller Health Center, provide three courses in the Lower Division and several courses in the Upper Division. Graduate students will be given guidance in research leading to the M.S. and Ph.D. degrees.

For complete description of the courses and requirements for admission and graduation the student should consult the University Catalog.

COLLEGE OF PHYSICAL EDUCATION AND HEALTH

GENERAL STATEMENT

The College of Physical Education and Health offers programs of instruction and services under five departments, namely, Health Service, Intramural Athletics and Recreation, Required Physical Education for Men, Required Physical Education for Women, and The Professional Curriculum.

THE PROFESSIONAL CURRICULUM

ADMISSION REQUIREMENTS

For admission to the College of Physical Education and Health students must present a certificate of graduation from the University College, or the equivalent, and have the approval of the Admissions Committee of the College of Physical Education and Health. (Consult the University *Catalog* for detailed requirements.)

UNDERGRADUATE DEGREES

The College of Physical Education and Health offers four undergraduate degrees: The Bachelor of Science in Physical Education, The Bachelor of Science in Health Education, The Bachelor of Science in Recreation, and The Bachelor of Science in Physical Therapy. For complete information concerning the several curricula and the requirements for these degrees, the University *Catalog* should be consulted.

GRADUATE DEGREE

Courses are offered by this College in the Graduate School leading to the degree of Master of Physical Education and Health with a major in physical education. Admission and degree requirements for graduates of accredited institutions are described under the Graduate Division section of this *Catalog*.

THE GRADUATE DIVISION

THE GRADUATE SCHOOL

ADMINISTRATION

The Graduate School consists of the Dean, the Graduate Council, and the Graduate Faculty. It is responsible for the establishment and enforcement of minimum general standards of graduate work in the University and for the coordination of the graduate programs of the various colleges and divisions of the University. The responsibility for the detailed operation of graduate programs is vested in the individual colleges and divisions.

ADMISSION

Application for admission to the Graduate School must be made to the Director of Admissions on forms supplied by his office and at times stipulated in the University Calendar. Applications are referred by the Director to the graduate selection committee of the various colleges and divisions for approval or disapproval. No transcript will be accepted as official unless it is received directly from the registrar of the institution in which the work was done.

In general, no student who is a graduate of a non-accredited institution will be considered for graduate study in any unit of the University.

Members of the faculty of the University of Florida with a rank of assistant professor or above (or equivalent), excepting County Agents in the Agricultural Extension Services, may not receive a graduate degree from this institution. They may, however, register for work in the Graduate School and apply the credit earned to graduate degrees to be conferred by other institutions.

Grade Standards.—Except as noted below, unqualified admission to the Graduate School is dependent upon presentation of an undergraduate record from an accredited college or curriculum with an average grade of "B" from the junior and senior years. In some units of the Graduate School and on the more advanced levels of graduate study, an undergraduate average considerably above "B" may be required.

The minimum undergraduate grade average acceptable for admission to programs leading to the degrees of Master of Arts in Education, Master of Education, and Master of Physical Education and Health is 2.5, calculated on a basis of 4.0 as the highest possible average and covering the last two years of undergraduate work (at least 60 semester hours).

In the College of Agriculture, admission to graduate study is normally limited to those students who have maintained at least a 2.5 honor-point average in their upper-division work and 3.0 in their major subject. For students with an undergraduate major in general agriculture, the minimum upper-division average is 2.75. In exceptional cases, where a candidate has demonstrated in some other way his fitness to do graduate work, as, for instance, outstanding achievement since earning the bachelor's degree, he may be considered for admission.

Graduate Record Examination.—A satisfactory average score on the Graduate Record Examination is required for admission. Each applicant for admission must submit scores on the aptitude test of the GRE, but either at the request of the department concerned or on his own volition, the applicant may submit in ad-

dition the score on one or more advanced subject-matter tests of the GRE. The scores on all tests taken will be weighed in regard to admission. The GRE scores will also be given consideration at a later date along with the graduate scholastic record when the student applies for admission as a candidate for an advanced degree.

The Graduate Record Examination is given four times a year—in November, January, May and July at a great many locations in the United States including Gainesville, Florida. To determine exact dates and the most convenient location, the student should write to Educational Testing Service, Princeton, New Jersey. Applications are required several weeks ahead of the examination and scores are received about a month after the examination. Hence it is necessary to apply for the GRE in early October if admission is desired in February, in early April for admission to the summer session, and in early June for admission in September. Undergraduates are advised to take the Graduate Record Examination in January or May if admission to the Graduate School is desired for the following September.

Students educated in foreign countries who apply for admission while residing outside the United States may be given a postponement and permitted to take the GRE during the first semester of attendance at the University of Florida. Registration for a second semester will depend upon completion of the examination.

Trial Program.—The Graduate School approves two types of trial programs under fifth-year undergraduate registration for applicants whose admission or rejection for graduate study is in doubt. These programs are arranged by the major department when the student has been referred to it for this purpose by the Registrar. Trial programs shall be strictly reserved for genuinely problematical or borderline cases.

Type I (Partly Transferable): a program of about 15 semester hours consisting of advanced undergraduate courses and no more than 6 hours of graduate courses. Upon completion of the program with an average grade of "B" or better, up to 12 hours may be transferred to the student's graduate record, provided that this transfer is approved by his major department and college and that all other requirements for admission to the Graduate School have been met.

Programs of Type I are used where a student's previous grade record or Graduate Record Examination scores are on the borderline of acceptability.

Type II (Non-Transferable): a program of 15 or more hours of undergraduate work, none of which may be transferred to the student's graduate record.

Programs of Type II are used (a) to validate undergraduate records from non-accredited and unevaluated colleges and in cases where the quantity or quality of the student's preparation cannot be determined with sufficient certainty for purposes of judging admission; (b) to repair extensive deficiencies in undergraduate programs which do not meet the prerequisites for graduate study laid down by the student's proposed major department (minor deficiencies of less than 12 hours and field transfer requirements covered by the Catalog may be handled on a non-credit basis as part of the graduate program for students who meet admission standards).

If the trial program (of either type) is completed with an average grade of "B" or better and other admission requirements have been met, the student will upon recommendation of his major department and college be given unqualified admission to the Graduate School. To secure this change of status, the

student should apply through his department head and college dean to the Registrar.

All trial programs must be formally approved by the major department and college and filed with the Registrar and the Graduate School in order that there may be no question in either of the latter offices concerning the termination of the program or of the course to be used in calculating the grade average. Neither type of trial program may be continued beyond the prearranged termination.

Undergraduate Registration for Graduate Credit.—An undergraduate student at the University of Florida who has less than one semester of course work to complete for the bachelor's degree may request, in writing, through the dean of his college, approval by the Dean of the Graduate School of course registration eligible for graduate credit. Such approval can be given only to students who have maintained a "B" average in the upper division and whose total proposed program does not exceed 15 semester hours in a single regular semester or 6 hours in a summer term. Commonly, courses to be approved should be of full graduate caliber; approval of an advanced undergraduate course will be restricted to one not normally a part of the undergraduate program prerequisite to the graduate studies to be undertaken. For application to a specific advanced degree the course work taken must be earned with a grade of "A" or "B" with all course work for the semester at "B" average, and be recommended for transfer to the student's graduate record by his supervisory committee after he has been admitted to the Graduate School. Courses beyond the requirement of the bachelor's degree which are taken without such approval are not eligible for transfer as graduate credit. Foundation work required for a change of major must be taken without graduate credit.

Consultation with College and Department.—Before his first registration, the student should consult the college and department in which he will do his work concerning course requirements, deficiencies, if any, the planning of a program, special regulations, etc. All registrations require the signature of the dean of the college in which the degree is to be awarded or of his representative.

GENERAL REGULATIONS AND INSTRUCTIONS

Student Responsibility.—It is the responsibility of the student to inform himself concerning, and to carry out, all regulations and procedures required by the course he is pursuing. In no case will a rule be waived or an exception granted because a student pleads ignorance of the rule or asserts that he was not informed of it by his adviser or other authority.

Loads.—The maximum *full-time registration* in a single regular semester is 15 semester hours; the minimum is 12 semester hours. Part-time employment of any kind reduces the maximum study load permitted. One-third time graduate assistants with departmental duties of 15 hours per week may register for a maximum of 12 semester hours. One-half time graduate assistants with departmental duties of 20 hours per week may register for a maximum of 10 semester hours. Full-time employees of the University may register for one graduate course of no more than 4 semester hours, or for two courses totaling no more than 6 semester hours if one of the two courses is a thesis course. Full-time public school personnel are normally registered for a single course.

During the *summer session*, full-time registration for a candidate for a thesis degree is 6 to 8 semester hours; full-time registration for a student in a non-thesis master's program or an Ed.S. program is 9 semester hours. A graduate assistant may not exceed 6 semester hours, and a full-time employee is limited to one course or 3 semester hours. These regulations apply to the eight-week summer term.

Holders of fellowships and assistantships are required to register for graduate study programs commensurate with the study time permitted by their awards and in no case less than 6 semester hours.

Courses and Credits.—(1) Courses numbered 500-599 are for fifth-year or other advanced undergraduate programs. Regulations as to the use of these courses in graduate programs, grading, minimum class size will be the same as for courses in the 400 category. (2) Courses numbered 600 and above are limited to graduate students. (3) Courses numbered 700 and above are graduate courses primarily for advanced graduate students.

Undergraduate courses numbered 300 and above are acceptable for minor credit when taken as a part of an approved graduate program. Courses bearing numbers below 600 which have been approved for this purpose by the Graduate Council may be used for graduate major credit. However, in all cases at least fifty percent of the minimum course requirements must be in courses designated for graduate students only.

A complete list of approved graduate courses appears in the section of this Catalog entitled Departmental Courses. Departments reserve the right to decide which of these graduate courses will be given in any semester or summer session. The published Schedule of Courses does not always include all graduate courses offered; the departments, therefore, should be consulted concerning available courses.

Grades.—Passing grades for graduate students in courses numbered below 600 are "A" and "B." Passing grades in courses numbered 600 and above are "A," "B," and "C"; however, "C" grades in courses numbered 600 and above count toward a graduate degree only if an equal number of credit hours in courses numbered 600 and above are earned with a grade of "A."

Admission to candidacy for a graduate degree and the award of such degree depends (among other requirements) upon maintenance of an average grade of "B" for all work attempted in the major and minor fields. Any grade of "I" (incomplete) in the fields of the major and minor (or minors) must be removed by completing all required work, unless an honor-point average of 3.0 is maintained, including the hours of incomplete courses. Grades in courses numbered 699 and 799 are not considered in calculating these averages.

Change of Major.—Graduate students already admitted for work in one department who wish to transfer to another department must apply for transfer through the office of the dean of their college and must have their credentials approved by the graduate selection committee having jurisdiction in the new department. The Dean of the Graduate School and the Registrar must be notified in writing of the change in the major field. The student will be required to make up, without graduate credit, any undergraduate deficiencies in the new area.

Correspondence and Extension Work.—No courses may be taken for graduate credit by correspondence, and, except in the case of the Master of Arts in Edu-

cation and the Master of Education degrees, no courses may be taken for graduate credit by extension. In the case of the degrees mentioned, 6 semester hours of authorized extension graduate course work may be taken in the University of Florida for both course and residence credit; extension work taken at another institution (except Florida State University) may not be transferred to the University of Florida for graduate credit of any kind.

Fees.—The fees which graduate students must pay are listed in the section of the Catalog entitled *Expenses.* (See Table of Contents.)

Procedures for Final Semester.—At this stage it is more than usually important for the student to inform himself concerning deadline dates as set forth in the University Calendar and in the announcements issued by the Dean of the Graduate School, and the officials of his college, division, or department.

Early in the last semester the student should make formal application to the Registrar for his degree. When his thesis is ready to be put in final form he should get instructions from the office of the Dean of the Graduate School. He must arrange through the University Bookstore for proper academic costume to be worn at Commencement.

Normally, students in the Graduate School must be registered in the University at the time they receive a degree. If, however, a student has completed all requirements for his degree, including courses, residence, thesis or dissertation, and all examinations, at the time of registration for the semester in which his degree is to be awarded, the Graduate Council will consider a petition to waive this regulation. *In brief, a student must be registered for the semester in which his final examination is given.*

Other Dates.—The student must observe the regulations and dates for satisfying the *language requirements* and for applying for *admission to candidacy* for the degree sought.

DEGREES OFFERED

Non-Thesis Degrees

Master of Agriculture, with major in any field in Agriculture

Master of Business Administration, with major in any field in Business Administration

Master of Education, with major in any field in Education, including Business Education, and Industrial Arts Education

Master of Physical Education and Health, with major in Physical Education

Master of Rehabilitation Counseling

Specialist in Education

Thesis Degrees

Master of Science in Agriculture, with major in one of the following:

Agricultural Economics
Agricultural Education
Agricultural Engineering
Agronomy
Entomology
Food Technology and Nutrition
Fruit Crops
Ornamental Horticulture

- Animal Husbandry
- Bacteriology
- Botany
- Dairy Science
- Plant Pathology
- Poultry Husbandry
- Soils
- Vegetable Crops

Master of Science in Building Construction
Master of Science in Community Planning
Master of Science in Engineering, with major in one of the following:

- Aeronautical Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Engineering Mechanics
- Industrial Engineering
- Mechanical Engineering

Master of Science in Forestry
Master of Science in Pharmacy, with major in one of the following:

- Pharmaceutical Chemistry
- Pharmacognosy
- Pharmacology
- Pharmacy

Master of Science, with major in one of the following:

- Bacteriology
- Biology (Zoology)
- Botany
- Chemistry
- Entomology
- Geography
- Geology
- Mathematics
- Physics
- Plant Pathology
- Psychology

Master of Fine Arts, with major in one of the following:

- Painting and Drawing
- Crafts

Master of Arts in Architecture, with major in one of the following:

- Architectural Design
- Building Construction

Master of Arts in Education, with major in one of the following:

- Agricultural Education
- Business Education
- Educational Administration
- Elementary Education
- Foundations of Education
- Personnel Service
- Industrial Arts Education
- Secondary Education

Master of Arts, with major in one of the following:

- Accounting
- Communications
- Economics
- English
- Finance and Insurance
- French
- Geography
- Latin
- Management and Business Law
- Marketing
- Mathematics
- Philosophy
- Political Science
- Psychology

German
History
Inter-American Area Studies
Journalism
Real Estate
Sociology
Spanish
Speech

Doctor of Education, with major in one of the following:

Curriculum and Instruction
Educational Administration
Foundations of Education

Doctor of Philosophy, with major in one of the following:

Agricultural Economics
Agronomy
Animal Husbandry
Bacteriology
Biology (Zoology)
Chemical Engineering
Chemistry
Civil Engineering, including
  Sanitary Engineering
  Structural Engineering
Economics
Economics and Business Administration
Electrical Engineering
Engineering Mechanics
English
Fruit Crops
Geography
History
Inter-American Area Studies
Mathematics
Medical Sciences, including
  Anatomy
  Biochemistry
  Microbiology
  Physiology
Pharmacy, including
  Pharmaceutical Chemistry
  Pharmacognosy
  Pharmacology
  Pharmacy
Physics
Plant Pathology
Political Science
Psychology
Sociology (Latin American)
Soils
Spanish
Speech
Vegetable Crops

THE MASTER'S DEGREE

Residence.—For any master's degree the student must spend at least one full-time academic year, or equivalent, as a graduate student at the University of Florida.

If the work for the master's degree is done entirely in the summer, full-time study during four eight-week sessions will satisfy the residence requirement. This requirement may be reduced to (but not below) three eight-week summer sessions by transfer of work from another institution or by use of extension or other non-resident credit where accepted by the college concerned and by the Graduate Council.

Non-resident county agents in the Agricultural Extension Services may use three three-weeks summer sessions for the purpose of satisfying the residence requirement for the degrees Master of Agriculture or Master of Science in Agriculture, but only if they have also spent one regular semester in full-time resident graduate study (or two eight-weeks summer sessions) on the campus at the University of Florida.

Transfer of Credits.—Courses of full graduate level to the extent of 6 semester hours may be transferred from an institution approved for this purpose by the Graduate School. Acceptance of transfer credit requires approval of the student's supervisory committee and the Graduate Council. Non-resident or extension work taken at another institution (with the exception of Florida State University) may *not* be transferred to the University of Florida for graduate credit.

Time Limit.—All work for the master's degree must be completed within seven years from the time of first registration.

MASTER'S DEGREE WITHOUT THESIS

MASTER OF AGRICULTURE

The degree of Master of Agriculture is designed for those students who wish additional training before entering business occupations or professions, rather than for those interested primarily in research. The basic requirements, including those for admission, residence, supervisory committee, plan of study and admission to candidacy, are the same as for the Master of Science in Agriculture degree, as outlined elsewhere, but the work requirements are made to conform to the specific objectives of this degree.

Work Required.—A minimum of 36 semester hours of course work is required, at least 18 of which shall be designated strictly for graduates. Each student's program is designed to take into account the qualifications and needs of the individual and is subject to the approval of the supervisory committee. A thesis is not required, but the student must submit reports, term papers, and records of work accomplished. A *comprehensive written qualifying examination*, given by the supervisory committee is required before the beginning of the second semester of work. Failure to qualify in this examination will result either in the student's elimination from the program or in taking additional course work. A *final oral examination* by the supervisory committee covering the whole field of study of the candidate is required.

For further details, inquire of the Dean of the College of Agriculture.

MASTER OF BUSINESS ADMINISTRATION

The requirements for the Master of Business Administration degree have been designed to give the student broad general preparation for managerial work with emphasis upon developing his capacities and skills for business decision-making. Limited specialization in one or two fields is also possible.

Admission Requirements.—Completion of a minimum of 30 semester hours of undergraduate work in business administration and economics, including the following:

Economic Principles	6 semester hours
Statistics	3 semester hours
Accounting—Introductory	6 semester hours
Business Law	3 semester hours

ATG. 590—Survey of Accounting (3 semester hours) may be taken in lieu of the six semester hours of introductory accounting. At least fifteen hours of the

undergraduate courses, excluding ATG. 590, must be in junior level courses or higher.

Students who have had no previous work in business administration or economics will be required to take a foundation program of at least thirty semester hours meeting the requirements stated above.

Course Requirements for Degree.—A program of thirty semester hours of course work is required. This program is as follows:

1. Courses required of all candidates

BS. 679 Advanced Business Policy	3 semester hours
BS. 690 Business Research and Reports	3 semester hours
ES. 615 Economics of Business Decisions	3 semester hours
ES. 616 Economic Environment of Business	3 semester hours

2. Courses required of all candidates unless waived because of acceptable undergraduate courses taken in the same area:

BS. 610 Managerial Accounting	3 semester hours
BS. 664 Managerial Statistics	3 semester hours
BS. 671 Human Relations in Business	3 semester hours

3. Requirements in the fields of marketing, production management, and corporation finance:

   All candidates must complete at least one basic course in each of the fields of marketing, production management, and corporation finance. Such courses may be taken either as a part of the undergraduate program or as a part of the graduate program, within the limits noted. Candidates deficient in marketing will take MKG. 531, Marketing Principles and Institutions (3 semester hours). Candidates deficient in production management will take MGT. 575, Production Management Problems (3 semester hours). Candidates deficient in corporation finance will take FI. 427, Corporation Finance (3 semester hours). Of these three courses, only MGT. 575, Production Management Problems, and either one but not both of the other two courses may be used in satisfying the thirty hour requirement for the degree. The result of this will be that a student who is deficient in all three fields or in both marketing and corporation finance will have to complete thirty-three hours for the degree.

4. Electives: The remaining hours will be selected from graduate and advanced undergraduate courses in the candidate's field or fields of interest. A candidate should avoid undue specialization in the selection of his electives.

Examinations.—Each candidate will be required to pass both a written and an oral examination on his graduate work. The written examination will be given toward the end of the semester in which he expects to receive his degree and will be designed to test his ability to deal with the problems normally confronting business administrators. It will consist primarily of the analysis of a business case requiring the use of the various disciplines included in the curriculum. The oral examination will be given after the written and will be administered by a committee of three appointed from the graduate Faculty of the College of Business Administration.

MASTER OF EDUCATION

Purpose.—This degree is designed to increase the professional preparation of school personnel. The program has been planned to develop in public school workers a wide range of essential abilities and to give a broad background of advanced general education, rather than to encourage narrow specialization.

The Master of Education program seeks to develop the student in:

1. An understanding of the nature of the individual and the learning process;
2. An understanding of the purposes, issues, and trends of education in American democracy;
3. An understanding of the social realities of our time and how these influence the educative process;
4. A comprehensive, internally consistent pattern of values in keeping with our democratic traditions; a value-system which the student can apply where issues are concerned;
5. A personal philisophy of education which he can make explicit and which is consistent with his value patterns;
6. The ability to think and act creatively and adequately within his area of specialization or field of work, i.e., to see new problems, work out solutions, and communicate to others the results of his thinking and acting.

Description.—The Master of Education degree is offered under two plans.

Plan I is for secondary and junior college teachers who seek increased teaching skill and greater depth and scholarship in their teaching field. It is offered in the departments of Foundations of Education, Secondary Education, including Business Education, and Vocational Agriculture.

The minimum program for the M.Ed. under Plan I is 36 hours of course work above the 300 level, 18 of which must be at the 600 level or above with 18 hours of course work outside of the College of Education for students who have graduated from departments or colleges of education or who hold a regular Florida Graduate Certificate to teach. (For students who have graduated from colleges other than education, the total number of hours outside of education may be reduced but in no case to less than 6 hours.) The minimum requirement of course work in education under Plan I is either (a) 24 hours in the master's program with 18 hours at the 600 level or above, or (b) 36 hours at any level in the combined undergraduate and graduate program.

Plan II is used for specialized school personnel and elementary and industrial arts teachers and is offered in the departments of Educational Administration, Elementary Education, Industrial Arts Education, and Personnel Services.

The minimum program for the M.Ed. under Plan II is 36 hours of course work above the 300 level, 18 hours of which must be at the 600 level or above, with a minimum of 6 hours of course work outside of the College of Education. The student's undergraduate and graduate program must include a minimum of 36 hours of course work in education.

Transfer of Credits.—If recommended in advance by the Graduate Committee

and approved by the Dean of the Graduate School, a student may be permitted to study in other institutions to the extent of (but not to exceed) 6 semester hours. No graduate credits earned prior to admission to the University may be transferred without special recommendation of the Graduate Committee and the approval of the Graduate Council. No more than 6 semester hours of credit may be thus transferred.

Work Required.—Instead of having a fixed requirement of majors and minors, each student will be required to submit a plan of study which shows acceptable balance and direction. The planned program is approved by the student's counselor, with whose assistance the plan is first developed, then by the Education department head concerned and the Office of Graduate Studies in Education. If the filing of a plan is delayed the student faces the possibility that some work completed may not be accepted toward meeting degree requirements. After the program has been developed, any changes must be requested in writing and similarly approved.

The minimum course requirement is 36 semester hours, of which not more than 9 may be taken in any summer term (6 in six weeks, 3 in three weeks), and not more than 15 in any one semester. Six semester hours of workshop or extension courses may be allowed and will count as resident credit.

Courses designated as field laboratory courses may be taken to the extent of 6 semester hours of credit. It should be noted, however, that the University imposes a limit of 12 hours of credit in the aggregate on work allowed from (1) off-campus workshops and extension courses, (2) field laboratory courses, and (3) courses transferred from other institutions.

A thesis is not required.

A reading knowledge of a foreign language is not required, but correct and effective use of the English language is expected of all candidates. Admission to the work of this program is not a guarantee that the student will be admitted to candidacy for the degree.

Admission to Candidacy.—The faculty makes a determination as to the competence of the student at the time of his admission to candidacy. Admission to candidacy for the Master of Education degree may be recommended to the Graduate Council by the Graduate Committee of the College of Education on the basis of an unassembled examination to be given at the end of from 12 to 18 semester hours of graduate work at the University of Florida. The unassembled examination is evaluated by a committee of the faculty, which may recommend supplementary oral and/or written examinations for students whose admission to candidacy is in doubt.

The unassembled examination includes: (1) the student's academic record to date, (2) the student's scores on the *Graduate Record Examination* (3) evidence of competency in the use (oral and written) of the English language, (4) evaluation of personal qualities and promise of professional attainment by persons to whom the applicant's record is known, (5) the student's experience record, and (6) any other appropriate information.

The unassembled examination is administered through the Office of Graduate Studies in Education for the Graduate Committee. The office must receive these materials early in the term preceding that in which graduation is expected.

The student's remaining program of study will be planned in terms of needs as revealed in the Admission to Candidacy Examination. On approval of the

Graduate Committee, the candidate will be recommended for the degree upon the satisfactory completion of the designated course work. The faculty reserves the right to review the student's entire record before recommending graduation.

The candidate must have completed at least one year of teaching (or the equivalent) prior to taking the last 6 semester hours of work, or must have included in his record the satisfactory completion of an internship program or a minimum of 6 semester hours of student teaching.

The Graduate Committee of the College of Education.—A special counselor is appointed for each student in the Master of Education program. His work is under the general supervision of the Graduate Committee in the College of Education. The program is administered through the Office of Graduate Studies in Education.

MASTER OF PHYSICAL EDUCATION AND HEALTH

Work Required.—A minimum of 30 semester hours of course work is required, at least 15 of which must be courses in the fields of Physical Education, Health Education or Recreation designated strictly for graduates, or courses numbered 500 and above if approved for graduate major credit. Of the remaining 15 hours, at least 9 semester hours must be taken in courses outside the College of Physical Education and Health. At least 50 per cent of the minimum course requirements shall be from courses numbered 600 and above. The major for the degree is physical education.

All degree candidates must complete Florida teaching certification requirements in Physical Education by the conclusion of the master's degree program. Certification requirements must be met as a part of and/or in addition to degree requirements, if not already completed before admission to graduate study.

Supervisory Committee.—A committee of five members of the faculty of the College of Physical Education and Health, with the Dean of the College or some person designated by him serving as chairman, and the Dean of the Graduate School as an exofficio member, will supervise the work of students registered in this program, subject to the approval of the Graduate Council.

Admission to Candidacy.—Admission to the work of this program is not a guarantee that the student will be admitted to candidacy for the degree. The student will be required to pass a written and/or oral examination in addition to being recommended by the supervisory committee for admission to candidacy. This examination should be taken by the end of the student's first semester of residence.

Final Examination.—A thesis is not required but the candidate must pass a final examination at the close of his course work. This written and/or oral examination will be administered by the supervisory committee and will be confined largely to the student's major field of study.

MASTER'S DEGREE WITH THESIS

Required Registration.—The minimum registration required for the master's degree with thesis is 30 semester hours, including no less than 24 semester hours of regular course work and 6 semester hours of the research and thesis course numbered 699 in all departments.

At least one-half of the required 24 hours of regular course work must be in a single field of study designated the major, and the remainder, called the minor, must be in a different but related subject matter. One 6-hour minor is required; two 6-hour minors or one 12-hour minor may be taken. Minor work must be in a department other than the major. In special cases this requirement may be modified, but only with the written permission of the Dean of the Graduate School.

The work in the major field must be in courses designated strictly for graduates (numbered 600 and above), or, if approved by the Graduate Dean, in courses designated for advanced undergraduates and graduates. For the minor, courses numbered 300 and above may be taken.

At least 50 per cent of the required 24 semester hours of regular course work must be in courses numbered 600 and above. Registration in 699 is limited to a total of 12 semester hours.

Thesis.—All candidates for this degree are required to prepare and present a thesis (or equivalent in creative work) acceptable to their supervisory committees, the Dean of the Graduate School, and the Graduate Council. The candidate should consult the office of the Dean for instructions concerning the form of the thesis. The original copy of the thesis, bound in temporary binding, and accompanied by three copies of a brief abstract, must be in the Dean's office on or before the dates specified in the University Calendar. After the thesis is accepted, the original copy, together with the first carbon copy, will be deposited in the University Library.

Language Requirements.—(1) The requirement of a reading knowledge of a foreign language is left to the discretion of the student's supervisory committee or college. When a foreign language is required, the examination will be conducted by the Department of Foreign Languages; if an examination has already been passed at another institution, it must be validated at the University of Florida by the Department of Foreign Languages. If the student is majoring in a foreign language, that language may not be used to satisfy this requirement. The foreign language requirement must be satisfied before the student is admitted to candidacy. (2) The ability to use the English language correctly and effectively, as judged by the supervisory committee, is required of all candidates for this degree.

Special Supervisory Committee.—A special supervisory committee of not less than three members will be appointed for each student by the Graduate Dean upon the recommendation of the college concerned. This committee should be appointed as early as possible after the student has been admitted to the Graduate School and, in general, not later than the end of the first semester of study. The Dean of the Graduate School is an exofficio member of all supervisory committees.

Admission to Candidacy.—When a student has completed about one-half of his work for his degree, he should apply for admission to candidacy for that degree, using the forms provided for the purpose in the office of the Dean of the Graduate School. In order to be admitted to candidacy, the student must have (1) maintained a "B" average in registered course work, (2) passed a foreign language examination and a qualifying examination (if these are required in his curriculum), (3) chosen his thesis topic, (4) satisfied his supervisory committee, department head, and college dean that he is qualified to become a candidate for

his degree. It is the responsibility of his supervisory committee at this time to make such investigation as is necessary to determine his eligibility.

General Examination.—When all of the student's work is completed, or practically so, including the regular courses and the thesis, his supervisory committee is required to examine him orally or in writing or both on (1) his thesis, (2) his major subject, (3) his minor or minors, (4) matters of a general nature pertaining to his field of study. Using the form provided for the purpose the committee shall report in writing to the Dean of the Graduate School not later than one week before the time for the conferring of the degree whether all work has been completed in a satisfactory manner and whether on the basis of the final examination the student is recommended for his degree. In no case may this examination be scheduled earlier than six months before the degree is to be conferred, without special approval of the Graduate Council.

Special Thesis Abstract Required.—At the request of the State Department of Education of the State of Florida, the College of Education requires all candidates for the degree of Master of Arts in Education to prepare a 750 word abstract of the thesis, which is forwarded to the State Department for informational purposes.

THE ADVANCED SCHOOL OF THE COLLEGE OF EDUCATION

The Advanced School of the College of Education offers two degrees, the degree of Specialist in Education and the Doctor of Education degree. Work in the Advanced School will be available only to those who have shown a high degree of ability in their first year of graduate work. The purpose of the Advanced School is to develop leadership, research competency, and specialization.

Admission to the Advanced School in Education.—Admission to the Advanced School will be open only to persons who have:

1. Successfully completed 36 hours of professional course work in education.
2. Presented a record of successful professional experience, the appropriateness of which will be determined by the instructional department passing on the applicant's qualifications for admission.

In some instances, departments may admit students with the understanding that further experience may be required before the student will be recommended for the degree.

Admission to the Advanced School will be based on the following criteria:

1. High scholastic average during the fifth-year work (3.5 honor-point average or above, as computed at the University of Florida, will be considered evidence of good scholarship);
2. Results from the Graduate Record Examinations—Scholastic Aptitude and Advanced Education Tests;
3. Results from the Miller Analogies Test;
4. An oral examination administered by the department in which the student seeks to specialize;

5. Special interviews for individuals for whom the department of specialization seeks more data.

The judgment concerning admission of an individual student will be based on the consideration of a student's performance in all of these areas by the department in which the student desires to specialize. The department will certify to the Admission Committee that the student has met the criteria for admission to the Advanced School.

In all cases the record, experience, and personal qualifications of the person applying for admission are subject to the approval of the Admissions Committee.

Where possible, students should seek admission to the Advanced School before enrolling in any courses beyond the master's degree. Where this procedure is impossible, the student will register in the Graduate School and during the first semester of his work beyond the master's degree apply for admission to the Advanced School. If such candidate is found to be eligible, appropriate work taken during that term will be included in the planned program.

After completion of the fifth year any student approved by the Admissions Committee may register for courses, but admission to the Advanced School must be obtained before work may be counted for degrees or certificates above the master's level.

SPECIALIST IN EDUCATION

If the student chooses the Specialist in Education degree he will plan a minimum 36 hour program with his counselor. A maximum of 6 hours of transferred credit may be included. Such work must have been completed in an institution which offers the doctor's degree. No extension work may be transferred. Up to 6 hours in appropriate field laboratory courses, or 3 hours in field laboratory and 3 hours in regular extension courses offered by the General Extension Division of the University of Florida and Florida State University may be included.

The planned program of specialization must include at least 24 hours in courses open only to graduate students and the remainder in courses open to graduate and undergraduate students. The student may specialize in any of the established areas of the College of Education.

A thesis is not required. Emphasis will be placed upon the use of research rather than upon the development of skills in research techniques.

Admission to the Advanced School, the successful completion of one semester of work, and the approval of the department of specialization will constitute admission to candidacy for the Specialist in Education degree.

At the end of the 36-hour program the student will be given a final written and a final oral examination by a committee selected by the head of his area of specialization. Upon passing the examination the candidate will be awarded the Specialist in Education degree upon the approval of the faculty, and the Graduate Council.

The Ed.S. is planned as a terminal degree. If at the end of his program the student wishes to work for the EdD. he must meet the requirements stated for that degree.

Time Limit.—All work for the Specialist in Education degree must be completed within seven years from the time of first registration.

DOCTOR OF EDUCATION

The Doctor of Education degree is offered in Curriculum and Instruction, Educational Administration, and Foundations of Education. Each Doctoral candidate is expected to achieve understanding of the broad field of Education and competencies in the area in which he chooses to specialize.

Administration of the program leading to this degree is cared for through the Office of Graduate Studies in Education, which carries out the policies of the Graduate School and the Graduate Committee of the College of Education.

Admission to a program of work leading to the degree of Doctor of Education requires admission to the Advanced School of the College of Education, described previously, as well as admission to the Graduate School of the University of Florida.

All courses beyond the master's degree taken at another institution, to be applied toward the Doctor of Education degree, must be taken at an institution offering the doctor's degree and approved for the transfer of graduate credit by the Graduate School of the University of Florida.

Minors.—Minor work, or work in cognate fields is required. If one minor is selected, at least 18 hours of work therein will be required; if two minors are chosen, one must have at least 12 hours of course work, the other at least six. Minors may not be taken in any branch of Education.

In lieu of a minor or minors, the candidate may present a suitable program of not fewer than 18 hours of cognate work in fields other than Education. This program must have the approval of the student's supervisory committee. The College of Education faculty will expect the candidate to be prepared to answer questions, at the time of his oral examination, in any of the areas so chosen.

Admission to Candidacy.—Admission to candidacy for the degree of Doctor of Education rests on successful completion of the qualifying examination. Recommendation to the Graduate School for admission to candidacy is based on action of the supervisory committee, subject to the approval of the Graduate Committee of the College of Education.

The Qualifying Examination.—The applicant is recommended for the qualifying examination by his supervisory committee after he has completed sufficient course work and the research preparation requirements of the College of Education.

The examination consists of (1) a general section, administered by the Graduate Committee of the College of Education to all applicants; (2) a field of specialization section administered by the department or faculty groups concerned; (3) examination in the minor or minors, where involved; and (4) an oral examination conducted by the applicant's supervisory committee.

Re-examination.—If the student fails in his qualifying examination, he will not be given a re-examination unless for special reasons such an examination is recommended by his supervisory committee and approved by the Graduate Council. At least a semester of additional preparation is considered essential before re-examination.

The Seminar.—Each student is expected to develop a thesis project to be considered by a general doctoral seminar in the College. Participants in the

seminar will be faculty members of the college, other advanced students, and members of the supervisory committee. At the conclusion of the seminar the supervisory committee will report thereon to the Graduate Committee of the College of Education.

Research Preparation Requirement.— This requirement is satisfied by meeting the requirements in both Group 1 and Group 2 below:

Group 1.—(1) a course in Education Research (EDF. 760) and

(2) the *library* usage examination (usually given in connection with EDF. 760 at the University of Florida), and

(3) a basic course in *statistics* (EDF. 360, or PSY. 211, or MS. 310, at the University of Florida).

Group 2.—either

(1) a reading knowledge of one foreign language relevant to the student's need, *or*

(2) one of the following courses in measurements, statistics, or research: SY. 547 or SY. 670; EDF. 660 or PSY. 605; EDS. 605 or EDE. 702; EDF. 650; EDP. 613; PSY. 503, PSY. 504, PSY. 626, PSY. 632, PSY. 633, or PSY. 743; PHA. 604 or PHA. 510.

There is no language reguirement for the Doctor of Education degree. Courses taken at other institutions which may be the equivalent of course requirements indicated above may be considered, on recommendation of the applicant's supervisory committee.

Abstracts.—For the purpose of inclusion in a summary of research studies in Education, published by the College of Education, the candidate must supply one 1500-2500 word abstract of his dissertation, in addition to such other abstracts as may be required by the Dean of the Graduate School.

For information relating to *Residence*, the *Supervisory Committee*, *Time Limit*, the *Dissertation*, *Publication of the Dissertation*, and the *Final Examination*, the student is referred to the material presented under the heading *Doctor of Philosophy*. These statements are applicable to both degrees.

DOCTOR OF PHILOSOPHY

Course Requirements.—Doctoral study consists of the independent mastery of a field of knowledge and the successful prosecution of research, rather than in following out the steps of an established curriculum. For this reason, doctoral students are thrown in large measure on their own responsibility, and doctoral programs are more flexible and varied than those leading to lower degrees. The Graduate Council does not specify just what courses will be required for the Ph.D. degree, or how many. The basic general requirement is that the program should be unified in relation to a clear objective and that it should have the considered approval of the student's supervisory committee.

At least one and not more than two minors must be taken. The minor or minors may occupy as much as one third of a student's total time, or, roughly, one-half of the time devoted to course and seminar work.

Supervisory Committee.—The supervisory committee for a candidate for the

degree of Doctor of Philosophy should consist of at least five members, chosen from the Graduate Faculty. At least three members should be from the college or department recommending the degree, and one or two members should be drawn from a different educational discipline for the purpose of representing the student's minor or minors and furthering the coordination on this campus between colleges and disciplines. Supervisory committees are nominated by the department head (in no case by the student), approved by the dean of the college, and appointed by the Dean of the Graduate School. It is recommended that the supervisory committee be appointed as early as possible after the student has been admitted to doctoral work and in general not later than the end of the first semester of study. The Graduate Dean is an ex officio member of all supervisory committees.

The duties of the supervisory committee are as follows:

1. To inform the student of all regulations governing the degree sought. It should be noted that this does not absolve the student from the responsibility for informing himself concerning these regulations. (See *Student Responsibility.*)

2. To meet immediately after appointment to pass on the qualifications of the student and to discuss and approve a program of study for him.

3. To meet to discuss and approve the proposed dissertation project and the plans for carrying it out.

4. To conduct the qualifying examination, or, in those cases where the examination is administered by the department, to take part in it.

5. To meet when the work on the dissertation is at least one-half completed to review procedure, progress, and expected results and to make suggestions for completion.

6. To meet when the dissertation is completed to conduct the final oral examination and to satisfy itself that the dissertation is a piece of original research and a contribution to knowledge.

Language Requirement.—Except as noted below, a reading knowledge of two languages other than English is required. These languages will normally be French and German, but they may be any languages which can be shown to be of significant use in the field of study in which the student is taking his degree. However, a combination of two modern Romance languages is not permitted. In all cases where the language chosen is other than French or German, the student will be required to justify his choice and to obtain the approval of his supervisory committee, his college, and the Graduate Council. Justification of choice will be accomplished by showing the existence of an acceptably sizable or rapidly growing body of relevant scholarly material in the language in question.

As an alternative to a reading knowledge of two languages other than English, a candidate for this degree may substitute a functional knowledge of one such language. A functional knowledge of a language is understood to mean the ability to read, write, and speak that language with reasonable ease and accuracy. This alternative is subject to the approval of the student's supervisory committee and college as well as the Graduate Council, and is permitted only when the

knowledge of the language chosen can be shown to be needed in the preparation of the dissertation. For students in the Latin American Area Studies Program special requirements apply.

Knowledge of the languages presented will be tested and certified by the Department of Foreign Languages or by individuals or groups approved by this department. Where it is necessary for the examination to be conducted by individuals from outside the University, any expense involved will be borne by the student.

In certain departments individually approved by the Graduate Council (Business Administration, Agricultural Economics, and Animal Husbandry and Nutrition), a study of mathematics may be substituted for a reading knowledge of one foreign language. When this substitution is chosen, the courses in mathematics taken for this purpose may not be considered a part of the major or minor studies. The degree of proficiency in mathematics shall be determined as follows:

1. For a field in which calculus is not included through the master's degree, the student shall take and pass with a "B" or better the final examination in MS. 354 and any other courses in the Department of Mathematics specified by his supervisory committee.

2. For a field in which calculus is included as part of the bachelor's or master's program, the student shall either pass with a "B" or better, or demonstrate equivalent proficiency by written examination in 6 semester hours of work in the Department of Mathematics requiring MS. 354 as a normal prerequisite.

The language requirement should be met as early as possible in the student's program and must be met before the student can be admitted to the qualifying examination.

Residence.—(1) The minimum residence requirement is three academic years of full-time resident graduate study, or equivalent, at institutions approved by the Graduate School. Either the second or the third academic years of the three-year program must be spent in full-time study (except as noted in the following paragraph) on the campus of the University of Florida. Candidates in Agronomy, Animal Husbandry, Horticulture, Plant Pathology, and Soils may do their research at certain branch stations of the University of Florida Agricultural Experiment Station where adequate staff and facilities are available.

(2) In calculating residence, part-time study is evaluated on the basis of 15 semester hours as equal to a full load. Part-time study may be substituted for the year of full-time study stipulated in the preceding paragraph in either of the following proportions: (a) 30 semester hours earned in one calendar year; (b) 35 semester hours in four successive registrations (either including or excluding summer session registrations). An overload program, even when approved, will be valued as a normal program in meeting this residence requirement.

(3) Between the qualifying examination and the conferring of the degree, there must elapse a minimum of one academic year if the candidate is in full-time residence, or one full calendar year if the candidate is on less than a full-time basis.

Qualifying Examination.—The qualifying examination, which is required of all candidates for the degree of Doctor of Philosophy, may be taken during the second term of the second year of graduate study. The examination, conducted by the special supervisory committee, with the aid of the major and minor departments, is both written and oral and covers the major and minor subjects. The supervisory committee has the responsibility at this time of deciding whether the student is qualified to go on with work toward the Ph.D. degree.

If the student fails in his qualifying examination, he will not be given a re-examination unless for special reasons such an examination is recommended by his supervisory committee and approved by the Graduate Council. At least a semester of additional preparation is considered essential before re-examination.

Time Limit.—All work for the doctor's degree must be completed within five calendar years after the qualifying examination or this examination must be repeated.

Admission to Candidacy.—A graduate student does not become an actual candidate for the Ph.D. degree until he has been formally admitted to candidacy. Such admission requires the approval of the student's supervisory committee, the head of his department, his college dean, and the Dean of the Graduate School, and the approval must be based on (1) the academic record of the student, (2) the opinion of his supervisory committee concerning his over-all fitness for candidacy, and (3) a qualifying examination as described above. Application for admission to candidacy should be made at about the end of the second or the beginning of the third year of graduate study.

Dissertation.—A satisfactory dissertation showing independent investigation and research is required of all candidates. Since all doctoral dissertations will be published by microfilm, microcard, or printing, it is necessary that the work be of publishable quality and that it be in form appropriate for publication. The original copy of the dissertation must be presented to the Graduate Dean on or before the date specified in the University Calendar. The sum of $50 must be deposited with the Business Manager to cover the cost of publication as explained below.

Publication of the Dissertation.—Candidates for the Ph.D. and Ed.D. degrees may choose among the following three alternatives in the publication of their dissertations.

(1) Microfilm publication. In this case the University will refund $25 of the deposit as soon as the dissertation has been accepted and the final examination passed.

(2) Microcard publication. In this case the University will determine the cost of publication and either return any un-needed portion of the deposit or bill the student for any excess in cost above $50.

(3) Two-year postponement. The student may request a two-year period to investigate possibilities of publication by printing. If the dissertation is published as a book or monograph in essentially complete form, the Graduate Council will consider a request for refund of the entire deposit upon receipt of five copies of the published work. At the end of the two-year period, unless evidence of acceptance of the dissertation for such publication has been presented, the Graduate

Council will authorize publication by microfilm as indicated under (1) above.

Copyright.—Under (1) above the student may choose to copyright his dissertation before publication. The charge involved will be deducted from the $50 deposit before refund can be arranged.

Final Examination.—After the acceptance of the dissertation and the completion of all other prescribed work for the degree, but in no case earlier than six months before the conferring of the degree, the candidate will be given a final examination, oral or written or both, by his supervisory committee. Satisfactory performance on this examination completes all requirements for the degree.

SPECIAL PROGRAMS

There are a number of special graduate programs that are described in detail in the University Catalog. Students interested in the following programs are referred to the catalog for complete information:

School of Inter-American Studies.
Graduate Program in Public Administration
Research Program at The Oak Ridge Institute of Nuclear Studies
Statistical Laboratory
Graduate Program in Community Planning
Graduate Program in Rehabilitation Counseling

SPECIAL THREE WEEK COURSES

The courses listed in this section are for special groups and run for three weeks only. Students registering for courses listed in this section follow the same admission and registration procedures as other students but are limited to a maximum load of three semesters hours.

June 17—July 3

AGRICULTURAL ENGINEERING

AG. 670..—Research. 3 credits. Open only to vocational agriculture teachers. tional agriculture teachers.
To arrange AGE 15 CHOATE, R. E., and ROGERS, F.

Special problems in agricultural engineering.

AGRICULTURAL EXTENSION

AXT. 601.—Advanced Rural Leadership. 1½ credits.
9:20 Daily MCC 2 SENN, P. H. & STAFF
Laboratory: 1:00 to 4:00 Tuesday MCC 2

Advanced training in rural leadership methods.

AXT. 604.—Agricultural Extension through Group Action. 1½ credits.
10:30 Daily MCC 5
Laboratory: 1:00 to 4:00 Wednesday MCC 5

Advanced techniques in developing extension programs through group action.

AGRONOMY

AY. 426.—Individual Problems in Agronomy. 1½ credits.
Section 1. 8:10 Daily MCC 210 RODGERS, E. G.
Laboratory: 1:00 to 4:00 M MCC 210

Individual problems selected from the field of crop production, varietal improvement, fertilization practices and weed control.

AY. 626.—Agronomic Problems. 1½ credits.
Section 1. 8:10 Daily MCC 203 SENN, P. H.
Laboratory: 1:00 to 4:00 M MCC 203

Library, laboratory and field studies which relate to crop production and improvement. Experiments are studied, publications reviewed and written reports developed.

ANIMAL HUSBANDRY AND NUTRITION

AL. 601.—Special Topics in Animal Science. 3 credits.
Open only to vocational agriculture teachers and county agents.
Section 1. 8:10-11:30 Daily WAKEMAN, D. L.

Reviews and discussions of scientific literature in the field of animal science.

COMMUNICATIONS

COM. 518.—Teaching through Television. 3 credits. Prerequisite: Graduate or senior standing, or permission of instructor.

Lecture-laboratory—8:30-3:30 Daily STA 114 FRANKS, L. E. and GILSTRAP, G. W.

Study of the elements of television program production as applied to educational and informational programs, planning, preparation and production of programs in the television studio.

EDUCATION—ADMINISTRATION

EDA. 610.—Organization & Administration of Adult Education. 3 credits.
8:10-11:30 Daily YON MEYER, H.

EDUCATION—ELEMENTARY

EDE. 602.—Practices in Elementary Education, II. 3 credits..
Section 1 8:10-11:30 and 1:00-3:00 Daily YON HILLIARD, P. and MIEL, A.

Emphasis is placed upon an interdisciplinary approach to problems in social learnings of elementary children.

EDUCATION—FOUNDATIONS

EDF. 640.—Problems in Pupil Development and Learning. 3 credits.
Section 1. 9:20-12:40, 2:00-4:10 Daily NRN 43 GORDON, I.

Study is made of problems of particular interest to students in the field of pupil growth and learning.

EDF. 641.—Educational Psychology—Personality Dynamics. 3 credits.
Section 1. 9:20-12:40, 2:00-4:10 Daily YON COMBS, A.

An examination of the dynamics of behavior and its implication for education.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 667.—Supervised Farming Problems in Agricultural Education. 3 credits.
8:10-11:40 Daily AGE 101 LOFTEN, W. T.

This course will cover problems in planning and supervising farm programs.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 570.—Workshop in Individual - Dual Sports. 3 credits.
8:10-11:30; 2:00-4:30 Daily FLG 216 LEAVITT, N. M. and STAFF

A workshop designed to provide teachers an opportunity to explore current trends in the teaching of individual and dual sports.

SCHOOL ART

SCA. 333.—Planning the Art Curriculum. 3 credits.
8:10-11:30 and 1:00-3:00 Daily YON CAMPBELL, M. D.

A study of various types of school art expression based on an understanding of the needs of elementary school children. Experiences with many types of art media will be provided.

SPECIAL FOUR WEEK COURSE

June 17—July 11

Enrollment limited to selected educators from certain counties in Florida. Not open to general registration. Application forms may be obtained by writing the instructor and the application must be approved prior to June 1, 1958.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 491.—The Operation of Community Health Education Programs. 3 credits.
Prerequisite: Permission of the instructor.
8:10-11:30, 2:00-4:10 Daily FLG 210 BOYD, C. A.

Problems in operating community programs of health education. Field experiences in the student's local county health agencies, both official and voluntary. The course is offered in cooperation with the College of Education, the State Department of Education and the State Board of Health.

SPECIAL THREE WEEK COURSES

July 7—July 25

EDUCATION—ELEMENTARY

EDE. 560.—Teaching Science in the Elementary Schools. 3 credits.
8:10-11:30 and 1:00-3:00 Daily YON YOUNG, M.

Emphasis is placed upon the development of science content and methods and upon the trying out of these ideas and methods in the student's classroom.

EDE. 701.—Problems in Elementary Education, II. 3 credits.
9:20-11:30 and 1:00-3:00 Daily YON

Advanced course in elementary school curriculum.

EDUCATION—FOUNDATIONS

EDF. 640.—Problems in Pupil Development and Learning. 3 credits.
Section 2. 9:20-11:30, 2:00-4:10 Daily NRN 43 CUMBEE, C.

Study is made of problems of particular interest to students in the field of pupil growth and learning.

EDUCATION—PERSONNEL SERVICES

EDP. 603.—Education of the Gifted Child. 3 credits.
Prerequisite: None
9:20-12:40 and 2:00-4:10 Daily YON CUNNINGHAM, M.

Definitions of giftedness, characteristics of gifted children, school opportunities and outside of school influences which affect the achievement of gifted children will be considered. Other aspects of the problem of teaching gifted children, methods and materials which are effective with them, and the mental health aspects of their relationships with peers, families and other adults, will be stressed.

EDUCATION—SECONDARY

EDS. 603.—Community College Education. 3 credits.
Section 1. 8:10-11:30 Daily YON MEYER, H. K.

An analysis of the program and problems of the community college.

SPECIAL SIX WEEK COURSE

June 17—July 25

THE COURSES LISTED IN THIS SECTION RUN FOR SIX WEEKS ONLY. STUDENTS REGISTERING FOR THE COURSES BELOW FOLLOW THE SAME ADMISSION AND REGISTRATION PROCEDURES AS OTHER STUDENTS BUT ARE LIMITED TO A MAXIMUM LOAD OF SIX SEMESTER HOURS.

FLORIDA WORKSHOP: BULLETIN SERIES DIVISION. The workshop is being held for the purpose of preparing a bulletin in the area of guidance to be published by the Florida State Department of Education.

Participation in the workshop will be by invitation. Guidance personnel, as well as other school personnel who like to participate in the workshop, should communicate with one of the instructors or the Head of the Department of Personnel Services. (See ED. 657.)

EDUCATION IN FAMILY FINANCE WORKSHOP. Workshop sponsored by Committee on Education in Family Finance, the College of Education, and the College of Business Administration. (See EDS. 604 and EDS. 641.)

EDUCATION—GENERAL

ED. 657.—Florida Workshop: Bulletin Series Division. 6 credits.
8:10-11:40, 2:00-4:10 Daily BRO 2nd Floor, West Lounge LANE, D., and JOHNSON, V.

EDUCATION—SECONDARY

EDS. 604.—Curriculum Development Laboratory. 3 credits. (Must be taken concurrently with EDS. 641.)
12:50-3:00 Daily BRO East Recreation Room LOYD, J. W., and RICHARDSON, J. G.

Guided experiences in developing resource units for teaching and the writing of courses of study.

EDS. 641.—Economic Education in the Secondary School. 3 credits. (Must be taken concurrently with EDS. 604.)
8:10-11:30 Daily BRO East Recreation Room LOYD, J. W., and RICHARDSON, J. G.

Study and development of economic materials for better teaching of economic understandings in the elementary and secondary schools.

HY. 400.—Workshop in Asian Studies. 6 credits.
8:10 to 10:20 Daily PEA 114 HARRISON, J. A.
11:00 to 12:30 Daily LIB 419 HARRISON, J. A.

A general introduction to the civilization and cultures of Asia with particular attention to the needs of secondary school teachers.

SCHEDULE OF COURSES SUMMER SESSION 1958

JUNE 17 TO AUGUST 9

MINIMUM SIZE OF CLASSES

No undergraduate class or section will be continued or offered if, at the end of the regular registration period, prior to the day classes begin for a term or semester, the registration does not meet the following minimum requirements.

For Freshmen and Sophomore classes or sections (the comprehensive courses and courses numbered in the 100's and 200's) the minimum is 12 registrations.

For Junior classes or sections (courses numbered in the 300's) the minimum is 8 registrations.

For Senior classes or sections (courses numbered in the 400's and 500's) the minimum is 6 registrations.

ABBREVIATIONS

The following abbreviations have been used to designate buildings:

ADM	ADMINISTRATION BUILDING
AE	BUILDING AE (Family Life)
AGE	AGRICULTURAL ENGINEERING BUILDING
ALA	AGRONOMY LABORATORY
AND	ANDERSON HALL
B	BUILDING B
BNX	BENTON ANNEX
BEN	BENTON HALL
C	BUILDING C (Art)
CRL	CANCER RESEARCH LABORATORY
CIL	CITRUS LABORATORY
DAL	DAIRY LABORATORY
E	BUILDING E
ENG	ENGINEERING AND INDUSTRIES BUILDING
F	BUILDING F
FLI	FLINT HALL
FLG	FLORIDA GYMNASIUM
FLO	FLOYD HALL
FML	FARM MACHINE LABORATORY
HGH	HORTICULTURE GREENHOUSE
I	BUILDING I (Classrooms)
J	BUILDING J (Biology Laboratory)
K	BUILDING K
MAT	MATHERLY HALL
MSB	MEDICAL SCIENCES BUILDING
MIL	MILITARY BUILDING
MPL	MEAT PRODUCTS LABORATORY
N	BUILDING N (Engineering Classrooms and Laboratories)
NEW	NEWELL HALL
NEA	NEWELL ANNEX
NRN	NORMAN HALL
NUL	NUTRITION LABORATORY
OD	OFFICE D
OE	OFFICE E
OF	OFFICE F
PEA	PEABODY HALL
PEC	PEST CONTROL BUILDING
PHY	PHYSICS BUILDING
POL	POULTRY LABORATORY
R	BUILDING R (Music)
RLA	REED LABORATORY
ROL	ROLFS HALL
SEA	SEAGLE BUILDING
SAL	SANITARY LABORATORY
STA	STADIUM
TUL	TUNG LABORATORY
U	BUILDING U (Architecture and Art)
UAN	FLORIDA UNION ANNEX
VEL	VEGETABLE PROCESSING LABORATORY

L	BUILDING L
LAW	LAW BUILDING
LEI	LEIGH HALL
LIB	LIBRARY
LSP	LIVESTOCK PAVILION
MCC	DAN McCARTY HALL
VFH	VEGETABLE FIELD HOUSE
WAL	WALKER HALL
WGY	WOMEN'S GYM
WPL	WOOD PRODUCTS LABORATORY
X	BUILDING X
YON	YONGE BUILDING

C-1

C-11—American Institutions. 4 credits.

(Register for the lecture and one discussion section.)

Lecture Section 11: 10:30 TTh WAL AUD

Discussion Sections:

Section 101 7:00 Daily PEA 1
Section 102 8:10 Daily PEA 101
Section 103 8:10 Daily PEA 1
Section 104 9:20 Daily PEA 101

C-12—American Institutions. 4 credits.

(Register for the lecture and one discussion section.)

Lecture Section 21: 10:30 MW WAL AUD

Discussion Sections:

Section 201 7:00 Daily PEA 2
Section 202 8:10 Daily PEA 2
Section 203 8:10 Daily PEA 5
Section 204 9:20 Daily PEA 2

C-11-12: The course is designed to develop insight into the interrelated problems of present American institutions. The historical bases of our evolving institutions are demonstrated in technology, economic life, government, family life, and in religion. Such a study is undertaken to show the effect upon values resulting from the tensions existing between the individual and his social institutions, and to suggest ways of achieving a greater degree of individual and collective social adjustment.

C-2

C-21.—The Physical Sciences. 3 credits.

(Register for the Lecture Section and one Discussion Section.)

Lecture Section 11: 2:00 MW BEN 203

Discussion Sections:

Section 101 8:10 Daily BEN 201
Section 102 9:20 Daily BEN 201
Section 103 10:30 Daily BEN 201

C-22.—The Physical Sciences. 3 credits.

(Register for one section only.)

Section 201 8:10 Daily BEN 205
Section 202 9:20 Daily BEN 205
Section 203 8:10 Daily BEN 203
Section 204 10:30 Daily BEN 205

C-21-22: The primary aim of the course is to give the student a working knowledge, through the solution of numerous problems, of the physical factors in the environment which affect the development of civilization, with its various cultures. These factors are primarily space relations, weather and climate, landforms, and material and energy resources. The concepts are taken from the fields of astronomy, physical geography, meteorology and climatology, geology, chemistry, and physics.

C-3

C-31.—Reading, Speaking, and Writing: Freshman English. 4 credits.
(Register for the Lecture Section, one Discussion Section, and one Laboratory Section)

Lecture Section 11: 8:10 W WAL AUD
Discussion Sections:
Section 101 7:00 M T Th F AND 20
Section 102 8:10 M T Th F AND 20
Section 103 8:10 M T Th F MAT 4
Section 104 9:20 M T Th F AND 20
Section 105 10:30 M T Th F MAT 6
Section 106 11:40 M T Th F AND 20

Writing Laboratory Sections:
Section 301 8:10- 9:30 M Th AND 203
Section 302 10:30-12:10 M Th AND 203
Section 303 12:50- 2:30 M Th AND 203
Section 304 10:30-12:10 T F AND 209

C-32.—Reading, Speaking, and Writing: Freshman English. 4 credits.
(Register for the Lecture Section, one Discussion Section, and one Laboratory Section)

Lecture Section 21: 9:20 W WAL AUD
Discussion Sections:
Section 201 8:10 M T Th F MAT 6
Section 202 9:20 M T Th F MAT 6
Section 203 9:20 M T Th F MAT 4
Section 204 11:40 M T Th F MAT 4

Writing Laboratory Sections:
Section 401 8:10- 9:50 T F AND 203
Section 402 10:30-12:10 T F AND 203
Section 403 12:50-2:30 M Th AND 209

C-31-32: Reading, Speaking, and Writing. Designed to furnish the training in reading, speaking, and writing necessary for the student's work in college and for his life thereafter. This training will be provided through practice and counsel in oral reading, in silent reading, in logical thinking, in fundamentals of form and style, in extension of vocabulary and in control of the body and voice in speaking. Students will be encouraged to read widely as a means of broadening their interests and increasing their understanding of literature.

EH. 133.—Effective Writing. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
2:00 Daily D 120 BRADSHAW, P.
3:10 W

Designed to aid the student to present his ideas in writing which is not only accurate and clear but pleasing and attractive to the reader. Qualified students are encouraged to do imaginative writing.

EH. 134.—Contemporary Reading. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
10:30 Daily AND 20 PENROD, J. A.

Designed to aid the student in planning for himself a well-rounded program in reading, which will serve to keep him abreast of the best in contemporary thought. Some time will be spent in introducing each student to the bibliography and writing in the area of his special professional interest.

C-41

C-41.—Practical Logic. 3 credits.

(Register for one section only.)

Section 1 9:20 Daily ADM 208
Section 2 10:30 Daily ADM 208
Section 3 11:40 Daily ADM 208

This course attempts to improve the student's thinking skills in at least five ways. It attempts to train the student to detect and resist common devices of persuasion used in propaganda and advertising, to avoid certain common errors in reasoning, to reason accurately from principles, to apply the methods of science to everyday problems, and to gain an understanding of and a measure of control over emotional and other psychological factors in thinking. Copious examples of reasoning, both sound and unsound, are examined.

C-42

C-42.—Fundamental Mathematics. 3 credits.

(Register for one section only.)

Section 1 8:10 Daily PEA 7
Section 2 9:20 Daily PEA 7
Section 3 10:30 Daily PEA 7
Section 4 11:40 Daily PEA 7

A practical elementary course consisting of the subject matter considered most useful for students who do not plan necessarily to specialize in mathematics. It covers the development of the number system, computation with approximate and exact numbers, algebra as a generalization of arithmetic, practical geometry, functional relationships, logarithms, the simple trigonometry of the triangle, simple and compound interest, and annuities. Not open to students who have completed Basic Mathematics.

C-5

C-51.—The Humanities. 4 credits.

(Register for the Lecture Section and one Discussion Section.)

Lecture Section 11: 11:40 M W WAL AUD

Discussion Sections:

Section 101 7:00 Daily AND 115
Section 102 8:10 Daily AND 115
Section 103 9:20 Daily AND 115
Section 104 10:30 Daily AND 115
Section 105 8:10 Daily AND 113
Section 106 9:20 Daily AND 113
Section 107 10:30 Daily AND 113
Section 108 9:20 Daily AND 110

C-52.—The Humanities. 4 credits.

(Register for the Lecture Section and one Discussion Section.)

Lecture Section 21: 11:40 T Th WAL AUD

Discussion Sections:

Section 201 7:00 Daily AND 112
Section 202 8:10 Daily AND 112
Section 203 9:20 Daily AND 112
Section 204 10:30 Daily AND 112
Section 205 8:10 Daily AND 110
Section 206 10:30 Daily AND 110

C-5.—The Humanities

A course designed to acquaint the student with the great literature philosophy, art and music in Western Civilization. Both our cultural heritage and the culture of our own day are studied. Major emphasis is placed upon mature understanding, enlarged appreciation, and a philosophy of life adequate for the needs of our age.

C-6

C-61.—Biological Sciences. 3 credits.
(Register for one Lecture Section and one Discussion Section.)
Lecture Section 11: 11:40 T FLI 101
Lecture Section 12: 2:00 Th FLI 101
Discussion Sections:
Section 101 7:00 Daily FLI 104
Section 102 8:10 Daily FLI 104
Section 103 9:20 Daily FLI 104
Section 104 10:30 Daily FLI 104
Section 105 11:40 Daily FLI 104
Section 106 8:10 Daily FLI 110
Section 107 9:20 Daily FLI 110

C-62.—Biological Sciences. 3 credits.
(Register for one Lecture Section and one Discussion Section.)
Lecture Section 21: 2:00 T FLI 101
Lecture Section 22: 11:40 Th FLI 101
Discussion Sections:
Section 201 7:00 Daily FLI 112
Section 202 8:10 Daily FLI 112
Section 203 9:20 Daily FLI 112
Section 204 10:30 Daily FLI 112
Section 205 8:10 Daily FLI 102
Section 206 10:30 Daily FLI 110

C-6.—Biological Sciences
A course designed to develop: (1) an understanding of and interest in the nature of organisms through a study of important basic biological concepts illustrated and supported by a suitable, carefully limited, selection of examples; (2) an appreciation of the contributions of the biological sciences to man's understanding of the world he lives in, his material progress and his appreciation of the order, harmony and beauty of the world.

ACCOUNTING

ATG. 211.—Elementary Accounting. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily MAT 225 DA VAULT, J. W.
Section 2. 10:30 Daily MAT 224 DINMAN, R.

Basic training in accounting as a device for measuring business activity. Study of the assumptions underlying accounting and the materials necessary for recording and reporting transactions; preparation and interpretation of financial and operating statements. Not open to students with 4BA classification.

ATG. 212.— Elementary Accounting. 3 credits Prerequisite: Atg. 211.
(Register for one section only.)
Section 1. 8:10 Daily MAT 16 MOORE, J. F.
Section 2. 9:20 Daily MAT 16 MOORE, J. F.

Accounting for different equity structures and for cost reporting and control. Intensive analysis of reports and statements. Not open to students with 4BA classification.

ATG. 311.—Intermediate Accounting. 3 credits. Prerequisite: Atg. 212.
8:10 Daily MAT 119 BENNINGER, L. J.

A study of the assumptions underlying income determination and the theories of matching costs with revenues. Asset acquisition valuation and expiration.

ATG. 312.—Intermediate Accounting. 3 credits. Prerequisite: Atg. 311.
11:40 Daily MAT 119 RAY, D. D.

Accounting problems resulting from the corporate form of organization. Special problems of analysis including those that arise as the result of rapidly changing price levels.

ATG. 313.—Industrial Accounting. 3 credits. Prerequisite: Atg. 212.
10:30 Daily MAT 225 DA VAULT, J. W.

Emphasis on interpretation and control of costs. Introduction to various systems of cost accumulation and organization for analysis and control. Standards and simple variance analysis.

ATG. 411.—Advanced Accounting. 3 credits. Prerequisite: Atg. 312.
11:40 Daily MAT 225 ANDERSON, C. A.

Special topics in income determination and correction, compound interest, annuities, and insurance contracts. Equity aspects of accounting for partnerships and estates.

ATG. 412.—Auditing. 3 credits. Prerequisite: Atg. 312.
9:20 Daily MAT 225 DINMAN, R.

Professional ethics, legal responsibilities, and auditing standards. Auditors' objectives, working papers, procedures, and reports.

ATG. 414.—Income Tax Accounting. 3 credits. Prerequisite: Atg. 311.
10:30 Daily MAT 16 PETERSON, E. G.

A study of the federal income tax law and related accounting problems. Determination of gross income and deductions. Practice in the preparation of returns for individuals, corporations, and partnerships, and in the use of the loose-leaf income tax service.

ATG. 415.—Corporate Accounting. 3 credits. Prerequisite: Atg. 411.
8:10 Daily MAT 224 ANDERSON, C. A.

Corporate accounting problems in the area of consolidation, reorganization, quasi-reorganization, mergers and voluntary and involuntary liquidations.

ATG. 417.—Governmental and Institutional Accounting. 3 credits. Prerequisite or corequisite: Atg. 311.
9:20 Daily MAT 119 RAY, D. D.

Introduction to fund accounting, the budget process, account structure, and utilization of accounting data for significant reports.

GRADUATE COURSES

ATG. 611.—Accounting Theory. 3 credits. Prerequisite: Atg. 411.
9:20 Daily MAT 224 LANHAM, J. S.

Intensive study of accounting objectives with reference to the measurement of enterprise performance.

ATG. 613.—Cost and Budgetary Accounting. 3 credits. Prerequisites: Atg. 313 and Atg. 411.
10:30 Daily MAT 119 BENNINGER, L. J.

Analysis of complex cost problems, managerial use of cost reports in management and budget preparation. Design and installation of cost systems.

ATG. 614.—Research in Income Tax Accounting. 3 credits. Prerequisite: Atg. 414.
11:40 Daily MAT 16 PETERSON, E. G.

Individual initiative and cooperation effort in the study of income tax accounting. Relationships between tax accounting and business income accounting generally. Position of the accountant in tax practice. Original research in the application of income tax standards.

ATG. 699.—**Research and Master's Thesis.** 0 to 6 credits.*
To arrange.

Directed research and writing for the M.A. degree. Taken toward the end of the student's graduate program for credit in addition to the basic 24 hours required for the Master's degree.

AERONAUTICAL ENGINEERING

AN. 286.—**Introductory Aerodynamics.** 3 credits. Prerequisite: PS. 205. Co-requisites: PS. 206, EM. 365.
9:20 Daily N 210

The airplane. The atmosphere. Fundamental dynamics and thermodynamics of air. Types of fluid flow. Airfoil theory. Wing theory.

AN. 692.—**Special Topics in Aeronautical Engineering.** Variable Credit.*
The second half of the course AN. 691-692.
To arrange.

AN. 699.—**Research and Master's Thesis.** 0 to 6 credits.*
To arrange.

AGRICULTURAL CHEMISTRY

GRADUATE COURSE

ACY. 699.—**Research and Master's Thesis.** 0-6 credits.*
To arrange.

AGRICULTURAL ECONOMICS

AS. 201.—**Principles of Agricultural Economics.** 3 credits.
11:40 Daily MCC 44 GREENMAN, J. R.

An introduction to the field of agricultural economics; principles of economics as applied to agriculture; economic problems of the agricultural industry and the individual farmer.

AS. 304.—**Farm Finance and Appraisal.** 3 credits.
8:10 Daily MCC 37 CLARK, H. B.

Volume, sources and uses of agricultural credit in Florida and the United States. The principles of credit and problems peculiar to financing farmers and farmers' associations. One field trip usually required.

AS. 306.—**Farm Management.** 3 credits.
10:30 Daily MCC 37 CLARK, H. B.

Not open to freshmen. Introduction to the principles of farm management. Types of farming in Florida and the United States, and factors which determine types of farming. The causes of success and failure of farms and farmers. Problems of labor, machinery, layout of farms, farm reorganization, and such.

AS. 308.—**Marketing.** 3 credits.
8:10 Daily MCC 44 McPHERSON, W. K.

Basic principles of marketing with emphasis placed on market functions, services, and organizations; elementary theory of demand and prices; commodity exchanges and future trading; transportation; grades and standards; market news; methods of increasing efficiency of markets; the role of co-ops and government in marketing. One field trip required.

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*Credit assigned must be shown on course assignment card.

AS. 413.—Agricultural Policy. 3 credits.
9:20 Daily MCC 44 GREENMAN, J. R.

A history of farmer attempts and accomplishments through organization and legislation to improve the economic and social status of agriculture. The basic problems and concepts involved in developing and carrying out an agricultural policy. Evaluation of present legislative programs and policies affecting the farmer.

COURSE FOR ADVANCED UNDERGRADUATES AND GRADUATES

AS. 501.—Research Problems in Land Economics. 3 credits.
To arrange.

Prerequisite: consent of instructor. Economic problems created by the continually changing uses of land resources, i.e., water, soil, timber, climate, situs, will be studied. Each student will select a problem, outline and conduct research on that problem and prepare a written report. Students majoring in other departments will be encouraged to select problems that will help them evaluate economic and social impact of the progress being made in other fields of learning, on the natural resource base, i.e., animal husbandry, agronomy, soils, forestry, community planning, Latin American programs, etc.

GRADUATE COURSES

AS. 605.—Research Problems in Farm Management. 3 credits.
To arrange.

Designed to train students in collecting, analyzing and presenting data on problems in the field of farm management. Special problems of interest to the individual student and agreeable with the instructor are selected for study. A statement of the problem is prepared, research work studied, publications reviewed and written reports developed.

AS. 611.—Research Problems in Marketing Agricultural Products. 3 credits.
To arrange.

Individual examinations of segments of the marketing system for Florida products. Emphasis may be placed on efficiency, market organization, trading arrangements, historical development or other aspects of the problem of interest to the student and agreeable with the instructor. A comprehensive report on the investigations and conclusions of the student is required.

AS. 628.—Problems in Statistics. 1-3 credits.*
To arrange. Identical with AY. 628.

Prerequisite: A graduate course in statistics. Special problems in statistics, in the areas of research methods, sampling methods, experimental design, theory of sampling and theory of experimental designs.

AS. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange.

AS. 799.—Research and Doctoral Dissertation. 1-6 credits.*
To arrange.

AGRICULTURAL ENGINEERING

AG. 306.—Farm Machinery. 3 credits.
9:20 M T W Th AGE 15 RICHARDSON, J. B.
Laboratory: 2:00 to 4:10 W AGE 17

The care, design, operation and repair of farm machinery.

AG. 401.—Farm Structures. 3 credits.
11:40 M T W Th AGE 15 RICHARDSON, J. B.
Laboratory: 2:00 to 4:10 T AGE 103

The functional requirements, design and construction of farm buildings.

*Credit assigned must be shown on course assignment card.

AG. 403.—Agricultural Engineering Investigations. 2 credits.
4:20 M T W Th AGE 15 ROGERS, F.

Assigned reading and reports of recent developments in the field of agricultural engineering.

GRADUATE COURSES

AG. 672.—Research Problems in Farm Machinery and Power. 3 credits.
To arrange AGE 104 RICHARDSON, J. B., and ROGERS, F.

AG. 673.—Research Problems in Farm Structures. 3 credits.
To arrange AGE 104 RICHARDSON, J. B., and ROGERS, F.

AG. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AGE 103 ROGERS, F.

AGRICULTURAL EXTENSION

GRADUATE COURSE

AXT. 621.—Research in Agricultural Extension. 3 credits.
Prerequisite: Consent of instructor.
To arrange MCC 209 SENN, P. H. and STAFF

Library and workshop relating to Agricultural Extension methods. Research work is studied, publications reviewed and written reports developed.

AGRONOMY

AY. 324.—Forage and Cover Crops. 3 credits.
8:10 M T W Th MCC 204 HOVELAND, C. S.
Laboratory 12:50-3:00 W MCC 204 HOVELAND, C. S.

Plants that produce feed for livestock. Methods of growing and utilizing forage crops. Plants suited for cover and conservation programs.

AY. 329.—Genetics. 3 credits.
8:10 Daily MCC 5 LINDEN, D. B.

The fundamentals of inheritance, emphasizing the application of Genetics and its associated branches of science in the improvement of economic plants and animals and in programs of human betterment.

AY. 426.—Individual Problems in Agronomy. Variable credit.
Section 2 To arrange MCC 207 RODGERS, E. G.

Individual problems selected from the fields of crop production or weed control.

GRADUATE COURSES

AY. 626.—Agronomic Problems. 3 credits.
Section 2 To arrange MCC 203 SENN, P. H.

Library, laboratory and field studies which relate to crop production and improvement. Experiments are studied, publications reviewed and written reports developed.

AY. 651.—Design of Experiments. 3 credits. Prerequisite: Consent of Instructor.
9:20 Daily MCC 215 ASH, W. O.

Randomized, randomized complete block, Latin square, split plot, and factorials. Point and interval estimation and tests of significance. Orthogonal comparisons, multiple comparisons, missing plot estimation and variance components. Applications to problems in research.

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*Credit assigned must be shown on course assignment card.

AY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange MCC 209 SENN, P. H.

AY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange MCC 209 SENN, P. H.

ANIMAL HUSBANDRY AND NUTRITION

AL. 309.—General Animal Husbandry. 3 credits.
7:00 Daily MCC 44 LOGGINS, P. E., WAKEMAN, D. L.

Types and breeds of farm animals; market classification; selection and management.

GRADUATE COURSES

AL. 601.—Special Topics in Animal Science. 3 credits.
Section 2. To arrange. STAFF

Reviews and discussions of scientific literature in the field of animal science.

AL. 609.—Problems in Animal Husbandry and Nutrition. Variable credit.*
To arrange STAFF

AL. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange STAFF

AL. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange STAFF

ANTHROPOLOGY

APY. 500.—Field Session in Archaeology. 6 credits. Prerequisite: 6 hours of anthropology, including APY 201.
To arrange GOGGIN, J. M.

Excavation of archaeological sites, recording of data, laboratory handling and analysis of specimens; and study of the theoretical culture principles which underlie field methods and artifact analysis.

APY. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of anthropology, including APY 201.
To arrange STAFF

ARCHITECTURE

AE. 101.—The Arts of Design. 3 credits.
2:00 Daily E 180

A survey of the visual arts: An introduction to the principles of Landscape Architecture, Community Planning, Architecture, Building Construction, Interior Design, and allied arts. Course objectives are to lead the student into an understanding and enjoyment of the visual arts and to enable him to develop a valid basis in the selection of a career in the arts of design.

AE. 102.—Vision and Graphics, I. 3 credits.
9:20-12:40 Daily E 116

Functions and limitations of vision. The interpretation of spatial relationships. Visual and graphic exercises for development of observation, graphic techniques, imaginative ability, visual design, and aesthetic judgment. Study of the elements of design and principles involved in their use.

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*Credit assigned must be shown on course assignment card.

AE. 203.—Vision and Graphics, II. 3 credits.
9:20-12:40 Daily E 174

Prerequisites: AE. 101, AE. 102. Techniques of graphic representation. Projects in Research and Design. Introduction to the organization of space for human activity. The study of the basic influences of climate, natural environment, technology, and culture on the design and construction of shelter.

AE. 204.—Basic Design. 3 credits.
12:50-4:10 Daily E 126

Prerequisite: AE. 203 or approval of Adviser. Continuation of AE. 203. Projects in Building Research and Architectural Design. Introduction to the study and application of planning techniques.

AE. 205.—Building Technology. 3 credits.
7:00-9:10 Daily E 157

The first half of the course AE. 205-206. Corequisite: PS-201. The materials and methods of building. The analysis of natural and manufactured building materials; their sources; their physical, structural, and aesthetic properties. The study of elementary framing systems; their methods of assembly and architectural expression. An introduction to mechanical equipment.

AE. 206.—Building Technology. 3 credits.
7:00-9:10 Daily E 180

The second half of the course AE. 205-206. Prerequisite: AE 205, MS 105 or approved alternate. Mechanics and strength of materials: The study of types of loads exerted on buildings, their transmission through the building frame and the forces and stresses produced in structural framing members. The characteristics of basic types of structural building frames and their integration in design.

UPPER DIVISION COURSES

AE. 321-322-323.—Special Studies in Architecture. 3 credits each unit.
10:30 Daily E 180

Completion of Lower Division program in Architecture, its equivalent, or approval of Adviser. Special studies in Architecture adjusted to transfer students, special students, or other upper division students.

AE. 506-507-508-509-510.—Thesis in Architecture. 3 credits each; group total 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 501-502-503-504-505.
To arrange E 175

GRADUATE COURSES

AE. 699.—Research and Master's Thesis. 0 to 6 credits.*

For students working for the master's degree. Credits cannot be used to reduce the total course work required for the degree.

ART

ART 112.—Textiles and Clothing. 2 credits.
9:20-11:30 Daily. X 15. BORGIA, A. P.

Textiles in relation to their characteristics, durability, and use for clothing and home furnishings. Basic principles of clothing construction.

ART. 123.—Color and Design. 3 credits.
10:30-12:40 Daily. C 103 CRAVEN, R. C.

A study of the elements and principles of design as a means of developing graphic expression on a two-dimensional surface.

*Credit assigned must be shown on course assignment card.

ART 124.—Drawing and Visual Perception. 3 credits.
8:10-10:20 Daily C 101 PURSER, S. R.

Creative drawing with an emphasis on developing visual perception, physical coordination, awareness of media, and individual creativity.

ART 226.—Pictorial Composition. 3 credits. Prerequisite: ART 123.
10:30-12:40 Daily C 100 PURSER, S. R.

The use of design principles in expressing ideas. Oil paint is the principal medium.

ART 290.—Art Survey. 3 credits.
9:20 Daily X 14 GRISSOM, E. E.

An introduction to important examples of painting, sculpture, architecture and related arts from 4000 B. C. to contemporary art movements.

ART 301.—Design I. 3 credits. Prerequisite: ART 226.
10:30-12:40 Daily X 1 MC INTOSH, P. R.

An investigation of color, line and design, and their relationship to pictorial composition. Problems will be based upon organization of the picture plane and will be developed through the various phases of watercolor techniques as media for visual expression.

ART 302.—Design II. 3 credits. Prerequisite: ART 301.
10:30-12:40 Daily X 1 MC INTOSH, P. R.

A continuation of ART 301, with emphasis on individual experimentation in the various water media.

ART 330.—Patternmaking. 3 credits.
8:10-10:20 Daily X 15 BORGIA, A. P.

Fundamental principles of flat pattern designing by use of basic foundation patterns in various scale measurements.

ART 338.—Draping. 3 credits.
9:20-11:30 Daily X 15 BORGIA, A. P.

Introduction of principles of designing patterns by use of dress forms.

ART 341.—Elementary Photography. 3 credits.
10:30-12:40 Daily X 12 ALSUP, G. W.

Fundamental course in camera operation and dark room technique with practical applications in the field of education.

ART 351.—Painting I. 3 credits.
10:30-12:40 Daily C 100 PURSER, S. R.

Various projects in painting based on the needs of the individual students as ascertained by conferences with the instructor.

ART 352.—Painting II. 3 credits. Prerequisite: ART 351.
10:30-12:40 Daily C 100 PURSER, S. R.

A continuation of ART 351.

ART. 360.—Layouts. 3 credits.
8:10-10:20 Daily C 103 CRAVEN, R. C.

A study of the separate elements of advertisements and an analysis of how these elements can most effectively be used to stimulate the observer. Reproductive processes are examined. Existing advertising designs are criticized and analyzed, then rearranged and redesigned for more effective impact. Materials used in teaching include type proofs, engravers' proofs and photographs.

ART 381.—Crafts I. 3 credits. Prerequisite: ART 122.
8:10-10:20 Daily X 3 ALSUP, G. W.

An introductory professional course in crafts with emphasis on the construction, glazing and firing of ceramic products.

ART 403.—Design III. 3 credits. Prerequisite: ART 302.
10:30-12:40 Daily X 1 MC INTOSH, P. R.

Exploration of the design problem with emphasis upon the development of the expressive potential of the individual.

ART 404.—Design IV. 3 credits. Prerequisite: ART 403.
10:30-12:40 Daily X 1 MC INTOSH, P. R.

Continuation of ART 403. A fuller consideration of select problems is used in the search for a personal expression.

ART 495.—History of Painting. 3 credits.
7:00 Daily X 14 GRISSOM, E. E.

A study of selected schools and movements in the history of painting. Emphasis upon Northern Rennaissance and Baroque Painting in Europe.

ASTRONOMY

ATY. 141.—Descriptive Astronomy. 3 credits. Not open to students who have had any other course in astronomy.
8:10 Daily WAL 213

An elementary survey of the astronomical universe with a minimum of mathematical work. Primarily intended as an elective for those not majoring in a physical science or mathematics.

BACTERIOLOGY

BCY. 300.—Bacteria in Everyday Life. 3 credits. Prerequisite: C-61 or equivalent.
12:50 M T W Th MCC 166 CARROLL, W. R. and PRATT, D. B.
Laboratory 2:00 to 4:10 T Th MCC 167

Bacteria in relation to evolution, higher plants and animals, and particularly man. Their functions in the cycle of chemical transformations, in food production, in disease, and in general sanitation. The related activities of some yeasts and molds, and of the filterable disease agents. A terminal course, not acceptable for admission to advanced courses in bacteriology. Available for minor credit to graduate students in non-science curricula only.

GRADUATE COURSES

BCY. 600.—Public Health Microbiology. Variable credit.*
To arrange Jacksonville **BUREAU OF LABORATORIES STAFF

Principles and methods in diagnostic public health microbiology.

BCY. 699.—Research and Master's Thesis. 0-6 credits.*

BCY. 799.—Research and Doctoral Dissertation. 1-6 credits.*

BIOLOGY

BLY. 161—Biology Laboratory. 2 credits. Prerequisite or corequisite: C-61.
9:20 to 11:30 M T W Th J 101 KILBY, J. D.

An introductory laboratory course dealing with cells, mamalian anatomy, the major groups of plants, methods of reproduction and germ cell formation.

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*Credit assigned must be shown on course assignment card.

**Course given at Bureau of Laboratories, State Board of Health, Jacksonville.

BLY. 208.—Invertebrate Zoology. 4 credits. Prerequisites: BLY. 161 and 162.
Lecture Section: 10:30 M T W Th FLI 102 PIERCE, E. L.
Laboratory Section: 2:00 to 5:20 M T W Th J 201

Structure, function, and evolutionary relationship of a selected series of animals without backbones.

BLY. 301.—Biological Laboratory Technique for Teachers. 3 credits.
Lecture Section 12:50 M T W Th FLI 109 GRIFFITH, MILDRED
Laboratory Section: 2:00 to 5:20 M W FLI 6

Designed to provide prospective instructors at the high school level with a sound background in biology and information regarding methods of preparation of material and sources of supply for the high school course.

BLY. 302.—The Life of the Inland Waters of Florida. 3 credits. Prerequisite: C-6.
Lecture Section: 11:40 T Th FLI 109 HUSSEY, R. F.
Laboratory Section: 2:00 to 5:20 T Th FLI 2
Field Work: 5 hours To Arrange

A companion course to BLY. 300 but concerned with the common plants and animal life of our streams, pools, ponds, lakes and marshes. Particular attention is given to obtaining an acquaintance with those species and groups of organisms that comprise the more important, more conspicuous, and more interesting members of Florida's rich aquatic biota. Laboratory demonstrations, field trips and individual projects will form an important part of this course.

BLY. 430.—Individual Studies in Animal Biology. 3 credits. Prerequisites: At least fourteen hours in approved major courses in biology, and consent of instructor.

To arrange STAFF

Qualified students and the instructor concerned may choose a particular topic or problem for study. May be repeated for full credit.

GRADUATE COURSES

BLY. 605.—History of Biology. 2 credits.
10:30 M T W Th FLI 109 JONES, E. R.

BLY. 630.—Individual Studies in Animal Biology. 3 credits.
To arrange.
Prerequisite: Graduate status and consent of the instructor.

To arrange STAFF

Studies may be chosen from one or more aspects of the following fields: comparative anatomy, cytology, ecology, embryology, experimental biology, fresh water biology, game management, genetics, herptetology, histology, ichthyology, invertebrate zoology including arachnology and insect biology, limnology, malacology, mammalogy, marine biology, ornithology, parasitology, general or comparative physiology, protozoology, vertebrate palenzoology, and zoogeography.
BLY. 630 may be elected for additional credit in subsequent semesters.

BLY. 699.—Research and Master's Thesis. 0 to 6 credits.*

BLY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

BOTANY

BTY. 101.—General Botany. 3 credits.
8:10 M T W Th MCC 6 FORD, E. S.
Laboratory: 12:50-3:00 MCC 317

The form, structure, growth, reproduction and physiology of plants and their various organs.

*Credit assigned must be shown on registration blank.

BTY. 300.—**The Plant World.** 3 credits. Prerequisite: C-6 or BTY. 101.
7:00 M T W Th MCC 6 NOGGLE, G. R.
Laboratory: 10:30-12:40 T W MCC 317

The origin, distribution and uses of plants, particularly from the standpoint of their relationship to man and earth features.

GRADUATE COURSE

BTY. 600.—**Problems in Botany.** 1-4 Credits.*
To arrange

Problems in one or more of the fields of botany, taxonomy, and physiology, depending on the qualifications of the students.

BUILDING CONSTRUCTION

BCN. 412-413-414.—**Projects in Building Construction, Group 4.** 3 credits each;—group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series BCN. 401-402-403-404-411.
To arrange K 105

NOTE: A limited amount of remedial work will be offered to permit makeup in courses failed during the regular semester. Registration will be permitted only upon securing the written approval of the Head of the Department.

GRADUATE COURSES

BCN. 601.—**Building Construction.** 3 or 6 credits. Prerequisite: Bachelor's degree in Building Construction or equivalent.
To arrange K 109

Advance studies in building technology or in specialized areas of the building construction field selected by the student and approved by the faculty.

BCN. 603.—**Building Research.** 3 or 6 credits. Prerequisite: Bachelor's degree in Building Construction or equivalent.
To arrange K 109

Detailed investigation of a selected problem in the building construction field designed to make a significant contribution to present knowledge and practices in that field.

BCN. 699.—**Research and Master's Thesis.** 0 to 6 credits.*

For students working for the Master's degree. Credits cannot be used to reduce the total course work required for the degree.

BUSINESS ADMINISTRATION—GENERAL

BS. 799.—**Research and Doctoral Dissertation.** 1 to 6 credits.*
To arrange.

Directed research and writing for the Ph.D. degree in economics and business administration.

BUSINESS EDUCATION

BEN. 81.—**Introductory Typewriting.** 2 credits.
8:10 Daily and 2 hours to arrange NRN 306 DODSON, G. A.

Skill in typewriting developed through practice on personal and business problems.

BEN. 91.—**Introductory Shorthand.** 3 credits.
9:20 Daily and 2 hours to arrange NRN 306 DODSON, G. A.

The theory of Gregg shorthand is completed, using the functional method.

*Credit assigned must be shown on course assignment card.

BEN. 181.—Advanced Typewriting. 2 credits. Prerequisite: BEN. 81 or BEN. 82 or permission of department.
10:30 Daily and 2 hours to arrange NRN 306 DODSON, G. A.

Provides more intensive training in typewriting.

BEN. 291.—Shorthand Dictation and Transcription. 3 credits. Prerequisites: BEN. 181 and 191, or permission of department.
2:00 Daily and 4 hours to arrange NRN 306 DODSON, G. A.

Dictation and transcription are emphasized.

BEN. 352.—Office Machine Techniques. 3 credits. Prerequisite: BEN. 81 or permission of department.
9:20 Daily and 4 hours to arrange NRN 305 CREWS, J. W.

The voice-writing machines, duplicating machines, adding machines and calculating machines are studied, both as to techniques and operation. The student will be given opportunity to develop skill in the operation of these machines.

CANCER RESEARCH

GRADUATE COURSES

CR. 666.—Cancer Research Seminar. 1 to 3 credits.*
8:10-11:30 T CRL

Discussion of the work of the Cancer Research Laboratory. Papers on current literature. Presentation of theses.

CR. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

CR. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange.

CHEMICAL ENGINEERING

CG. 347.—Industrial Stoichiometry. 4 credits. Prerequisite: CY. 331. Corequisite: MS. 354, PS. 206.
10:30 Daily MIL 25
Laboratory 2:00 to 5:20 M W N 205

Industrial processes and calculations, weight balances, gas calculations, combustion processes, vapor pressure, humidity, etc.

CG. 356.—Principles of Chemical Engineering II. 3 credits. Prerequisite: CG 355.
9:20 Daily MIL 25

The fundamental chemical engineering operations: Flow of fluids, heat transfer, evaporation, humidity and air conditioning and drying.

CG. 361.—Materials of Engineering. 3 credits. Prerequisite: CY 218.
10:30 Daily ENG. 328

Production, properties and uses of ferrous and non-ferrous metals and alloys, Portland cement, clay products, wood and plastics.

CG. 364.—Chemical Engineering Thermodynamics I. 3 credits. Prerequisite: MS. 354. Corequisites: CY 402, CG 356.
8:10 Daily MIL 25

The first two laws of thermodynamics and their application to Chemical Engineering.

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*Variable, Credit assignment must be shown on course assignment card.

GRADUATE COURSES

CG. 641.—Heat Transmission. 3 credits.
7:00 Daily MIL 25

The extension of elementary principles to more advanced problems in steady and unsteady heat flow to fluids and solids.

CG. 699.—Research and Master's Thesis. 0 to 6 credits.*

CG. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

CHEMISTRY

CY. 121.—General Chemistry. 4 credits.
9:20 Daily LEI 207 STEARNS, T. W.
Laboratory: 12:50-4:10 M W LEI 138

Fundamental laws and theories of chemistry. Non-metallic elements and their compounds; metals and their compounds and some of their uses.

CY. 122.—General Chemistry. 4 credits.
7:00 Daily LEI 207 TUCKER, W. C., JR.
Laboratory: 12:50-4:10 T Th LEI 138

The second half of the course CY. 121-122.

CY. 123.—Qualitative Analysis. 3 credits. Prerequisite: CY. 122.
10:30 M T Th F LEI 207
Laboratory: 12:50-4:10 T Th LEI 236

Theoretical principles and laboratory techniques involved in the qualitative detection of the common metals and acid radicals.

CY. 217.—General Chemistry and Qualitative Analysis. 4 credits.
Prerequisites: Upper percentile rating in placement tests in physical sciences and mathematics or satisfactory completion of C-2. In general, freshmen should present evidence that they have had high school chemistry. Prerequisite or corequisite: MS. 105.
8:10 Daily LEI 207 RYSCHKEWITSCH, G. E.
Laboratory: 12:50-4:10 T Th LEI 136

A course in general chemistry including the fundamentals of qualitative analysis.

CY. 218.—General Chemistry and Qualitative Analysis. 4 credits.
10:30 Daily LEI 212
Laboratory: 12:50-4:10 M W LEI 136

The second half of the course CY. 217-218.

CY. 302.—Organic Chemistry. 4 credits.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 1: 8:10 Daily LEI 142 BUTLER, G. B.
Laboratory Sections:
Section 111 12:50-4:10 W F LEI 238
Section 112 12:50-4:10 T Th LEI 238

The second half of the course CY. 301-302.

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*Credit assigned must be shown on course assignment card.

CY. 331.—Introductory Quantitative Analysis. 4 credits. Prerequisite: CY. 123 or CY. 218.
8:10 M T W Th LEI 212 BLACK, A. P.
Laboratory: 12:50-4:10 M T W Th LEI 112

Theoretical principles and laboratory technique involved in quantitative determinations. Determinations include gravimetry, acidimetry and alkalimetry, oxidimetry and iodimetry.

CY. 362.—Organic Chemistry. 3 credits.
Prerequisite: CY. 122 or CY. 218. Corequisite: CY. 363, except for Physics majors.
9:20 Daily LEI 142 POLLARD, C. B.

A brief elementary course embracing the more important aliphatic and aromatic compounds.

CY. 363.—Organic Chemistry Laboratory. 2 credits. Corequisite: CY. 362.
12:50-4:10 T W Th F LEI 238

CY. 400.—Chemistry for Teachers. 6 credits. Prequisite: 1 year of college chemistry.
12:50 Daily LEI 207
Other time to arrange.

This course is designed primarily for teachers who wish to expand either their background in Chemistry or to refresh themselves with a modern approach. It will consist of a combination of lecture and laboratory work, reviewing fundamentals of Chemistry and stressing recent developments and techniques in the field.

CY. 402.—Physical Chemistry. 3 credits. Prerequisite: CY. 401. Corequisite: CY. 406, except for Physics majors.
9:20 Daily LEI 339 HAWKINS, J. E.

Colloids, electricity as applied in chemistry, chemical kinetics, photochemistry and introduction to quantum theory.

CY. 406.—Physical Chemistry. 1 credit. Corequisite: CY. 402.
12:50-4:10 TTh LEI 204

GRADUATE COURSES

CY. 606.—Advanced Organic Chemistry. 3 credits. Prerequisite: CY. 623.
8:10 Daily LEI 339 TARRANT, P.

Correlation of organic chemical reaction types with emphasis upon electronic displacement effects, carbonium ion reactions, radical reactions, displacement reactions and elimination reactions.

CY. 629.—Water Supply and Treatment. 3 credits.
10:30 Daily LEI 154 BLACK, A. P.

A survey of Florida hydrology and a discussion of the most recent developments in the treatment and stabilization of municipal and industrial water supplies.

CY. 633.—Instrumental Analysis. 3 credits.
10:30 M T W Th LEI 142 GROPP, A. H.
Laboratory to arrange.

An introduction to optical and electrochemical methods as applied to the analysis of solutions.

CY. 699.—Research and Master's Thesis. 0 to 6 credits.*

CY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

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*Credit assigned must be shown on course assignment card.

CIVIL ENGINEERING

CL. 223.—Surveying. 3 credits. Prerequisite: MS. 105.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 8:10 M T W Th ENG 428 WINSOR, A. N.
Laboratory Sections:
Section 11 2:00 to 5:20 M W ENG 320 WINSOR, A. N.
Section 12 2:00 to 5:20 T Th ENG 428 WINSOR, A. N.

Use of surveyors tape; level and transit; traversing and balancing surveys; calculation of areas; topographic mapping; land subdivision; adjustment of instruments.

CL. 226.—Higher Surveying. 2 credits. Prerequisite: CL. 223.
12:50 M W ENG. 428 WINSOR, A. N.
Laboratory 2:00 to 5:20 T Th ENG 324 WINSOR, A. N.

Triangulation systems; precise base-line measurements; map projections; coordinate systems; precise levels; line azimuth by Solar and Polaris observations; hydrographic surveys; introduction to photogrammetry; horizontal curves; cross-sections.

CL. 326.—Statics of Simple Structures. 4 credits. Prerequisite: EM. 365.
10:30 Daily ENG 324
Laboratory 2:00 to 5:20 M W ENG 324

Application of the methods of statics to structural analysis; a correlation between graphical and analytical methods; moments; shears; reactions; resultants; stress diagrams, and influence lines for statically determinate structures.

GRADUATE COURSES

CL. 699.—Research and Master's Thesis. 0-6 credits.*

CL. 799.—Research and Doctoral Dissertation. 1-6 credits.*

COMMUNICATIONS

COM. 323.—Radio Programming and Production. 3 credits.
2:00-4:00 Daily STA 316 BURTON, M. E.

Planning and producing programs for the local station and networks on a commercial and sustaining basis: casting, directing, rehearsing, cutting and timing.

COM. 430.—Individual Problems. 3 credits.
To arrange.

GRADUATE COURSES

COM. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

DAIRY SCIENCE

DY. 420.—Problems in Dairy Technology. 3 credits.
To arrange.

Qualified students may choose an approved problem covering some phase of dairy technology.

GRADUATE COURSES

DY. 623.—Problems in Dairy Production. Variable credit.*
To arrange.

Research for majors in dairy husbandry.

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*Credit assigned must be shown on course assignment card.

DY. 699.—Research and Master's Thesis. 0 to 6 credits.*

ECONOMICS

ES. 201.—Basic Economics. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily MAT 216 MERCER, N. A.
Section 2. 10:30 Daily MAT 102 SIMMONS, A.
Section 3. 11:40 Daily MAT 105 ROBERTS, M. J.

After a preliminary discussion of the nature of economics and economic concepts and institutions, this half of the course, ES. 201-202, emphasizes the accounting, analytical, and policy aspects of national income and product, along with such closely related topics as governmental finance, money and banking, and international trade and finance.

ES. 202.—Basic Economics. 3 credits.
(Register for one section only.)
Section 1. 7:00 Daily MAT 216 SIMMONS, A.
Section 2. 8:10 Daily MAT 10 BRADBURY, R. W.

This half of the course in Basic Economics, ES. 201-202, deals primarily with the theories of production, determination of prices and distribution of income in both regulated and unregulated industries. Some attention is also given to the problems of industrial relations, monopolies, and the comparative economic systems.

ES. 203.—Elementary Statistics. 4 credits. Prerequisite: C-42 or equivalent.
10:30 Daily MAT 118 MERCER, N. A.
1:00-3:10 T Th MAT 120

The statistical method as a tool for examining and interpreting data; acquaintance with such fundamental techniques as find application in business, economics, biology, agriculture, psychology, sociology, etc.; basic preparation for more extensive work in the field of statistics.

ES. 210.—Machine Technology in American Life. 3 credits.
8:10 Daily MAT 222 STERBA, R. L.

Shift from agrarian to industrial economy; development of machine technology and mass production; finance capitalism; impact of technological change on cultural pattern; class stratification and conflicts; relation of technology to nationalism and internationalism.

ES. 321.—Money and Banking. 3 credits. Prerequisite: ES. 201.
Section 1. 8:10 Daily MAT 111 WILMOT, W. V., JR.
Section 2. 11:40 Daily MAT 112 FRAZER, W. J., JR.

A study of money systems and standards; of the factors determining the size of the money supply with special emphasis on the role of commercial and central banks and government fiscal policy; and of the relationship between money, prices and production and employment.

ES. 327.—Public Finance. 3 credits. Prerequisite: ES. 201
10:30 Daily MAT 10 STERBA, R. L.

Principles governing expenditures of modern government; sources of revenue; public credit; principles and methods of taxation and financial administration as revealed in the fiscal systems of leading countries.

ES. 347.—Principles of Foreign Trade. 3 credits. Prerequisite: ES. 201
11:40 Daily MAT 116 BRADBURY, R. W.

Fundamental principles of foreign trade; significance of geographic, economic, social, and political influences; current practices and development in foreign trade; products of international commerce, protective tariffs, and other barriers to world trade; tendencies in the foreign trade of the United States.

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*Credit assigned must be shown on course assignment card.

ES. 351.—Elements of Transportation. 3 credits. Prerequisite: ES. 202.
9:20 Daily MAT 112 ROBERTS, M. J.

General survey of the significance, characteristics, and major problems of intercity transportation.

ES. 372.—Labor Problems. 3 credits. Prerequisite: ES. 202.
9:20 Daily MAT 111 FRISTOE, C. W.

Labor problems; insecurity, wages and income, hours, sub-standard workers, industrial conflict, attempts to solve labor problems by employers; personnel management, employee representation, employers' associations; attempts to solve labor problems by state; protective labor legislation, laws relating to settlement of industrial disputes.

ES. 382.—(Identical with GPY. 382) Principles of Resource Utilization. 3 credits. Prerequisite. GPY. 200.
9:20 Daily FLO 204 VARNEY, C. B.

A comprehensive review of the natural and human resources of the United States followed by an intensive study of the wise and wasteful practices of exploitation and utilization of these resources. A study of the human and economic significance of the principles of conversation with special reference to the South. Course designated to satisfy resource certification for social studies teachers.

ES. 407.—Economic Principles and Problems. 3 credits. Prerequisites: ES. 201-202.
11:40 Daily MAT 10 FRISTOE, C. W.

An advanced course in economic theory, dealing especially with the theories of production, price determination, and income distribution and their application to a selected list of current economic problems.

ES. 408.—Economic Principles and Problems. 3 credits. The second half of the course ES. 407-408.
9:20 Daily MAT 219 EUTSLER, R. B.

ES. 409.—Comparative Economic Systems. 3 credits.
10:30 Daily MAT 213 BLODGETT, R. H.

The economics of capitalism, socialism, communism, and fascism. The theoretical economics of capitalism, socialism, and communism, and the actual economics of the United States, Soviet Russia, England, Nazi Germany, and Fascist Italy are compared on the basis of such matter as industrial production, agriculture, exchange, credit and banking, income distribution, the status of labor, and international trade. Marxian Socialism is also considered briefly.

ES. 429.—Introduction to Business Cycles. 3 credits. Prerequisite: ES. 321.
8:10 Daily MAT 114 JACKSON, E. L.

An introduction to the principal theories of the business cycle including also a description of the various types of cycles and an examination of the important remedies that have been proposed.

GRADUATE COURSES

ES. 610.—The Development of the American Economy to 1860. 3 credits.
M 2:00-5:20, W 2:00-4:10 LIB 417 TUTTLE, F. W.

A functional approach to the study of the economic development of the United States. World Economic conditions that led to the settlement of America; the colonial period; the period of economic transition; the westward movement and the rise of the national economy; and economic causes of the Civil War.

ES. 622.—Money, Prices, and Business Cycles. 3 credits. Prerequisite: ES. 321.
To arrange JACKSON, E. L.

An analytical survey of the economic instabilities in capitalistic society, with emphasis upon forces operating to bring about changes in the general level of prices, including prices of productive agents, employment, and incomes.

ES. 692.—Neo-Classical Economics. 3 credits. The second half of the course ES. 691-692.

T 2:00-5:00, Th 2:30-4:30 LIB 417 BLODGETT, R. H.

Analysis, criticism, and restatement of the neoclassical price and production theories. Demand, supply, cost of production, and price determination under various conditions of the market will be be considered. The writings of Marshall, Hicks, Boulding, Davenport, Stigler, Fellner, J. Robinson, and Chamberlain provide the background for the discussion.

ES. 699.—Research and Master's Thesis. 0 to 6 credit hours.*

To arrange.

Directed research and writing for the M.A. degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

ES. 799.—Research and Doctoral Dissertation. 1 to 6 hours credit.*

To arrange.

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.

EDUCATION—GENERAL

ED. 418.—Audio-Visual Materials of Instruction. 3 credits.

10:30 Daily NRN 228 LEGATE, D. V.

A general course for teachers at all grade levels. Presents sources and methods of using audio-visual materials of instruction.

ED. 500.—Student Teaching I. 3 credits. Prerequisite: approval of department head.

To arrange NRN 329 SCRAFFORD, R. A., and MC CRACKEN, J.

Supervised observation, participation, and teaching under the guidance of a selected classroom teacher.

ED. 501.—Student Teaching II. 3 credits. The second half of the course ED. 500. Prerequisite: approval of department head.

To arrange NRN 329 SCRAFFORD, R. A., and MC CRACKEN, J.

GRADUATE COURSES

NOTE. Orientation Meeting for all graduate students in Education, Thursday, June 19, 7:00 p.m., in Norman Auditorium. This meeting will be devoted to a discussion of policies and programs for graduate students in the College of Education.

ED. 630.—Individual Work. 3 credits.

To arrange NRN 134A FOSTER, C. R.

ED. 651.—Audio-Visual Education. 3 credits.

8:10 Daily NRN 228 WINSOR, D.

The selection, evaluation and use of audio-visual materials, with emphasis upon projected still and sound motion pictures.

ED. 652.—Production and Utilization of Audio-Visual Materials. 3 credits. Prerequisite: ED. 651 or consent of instructor.

9:20 Daily NRN 228 WINSOR, D.

Designed to train materials supervisors, audio-visual coordinators, and other school personnel in the production of materials by photographic processes, and the operation of materials centers.

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*Credit assigned must be shown on course assignment card.

ED. 655.—**Mental Health in the Classroom.** 3 credits.
10:30 Daily NRN 226 LAIRD, D.

To assist teachers in the personality development of children.

ED. 659.—**Laboratory in Corrective Reading.** 6 credits. Prerequisite or corequisite: EDE. 675.
10:30-12:40 Daily AND 310 SPACHE, G.

Laboratory experience in the diagnosis, correction and prevention of reading difficulties.

ED. 699.—**Research and Master's Thesis.** 0 to 6 credits.*
To arrange NRN 134A FOSTER, C. R.

ED. 799.—**Research and Doctoral Dissertation.** 1 to 6 credits.*
To arrange NRN 134A FOSTER, C. R.

EDUCATION—ADMINISTRATION

GRADUATE COURSES

EDA. 600.—**Educational Organization and Administration.** 3 credits.
Section 1. 8:10 Daily NRN 316 EGGERT, C. L.
Section 3. 10:30 Daily NRN 138 EGGERT, C. L.

EDA. 601.—**Organization and Administration of Elementary Schools.** 3 credits.
2:00 Daily NRN 207 KIMBROUGH, R. B.

EDA. 602.—**Organization and Administration of Secondary Schools.** 3 credits.
11:40 Daily NRN 207 KIMBROUGH, R. B.

EDA. 603.—**Public School Business Administration and Finance.** 3 credits.
12:50 Daily NRN 207 JOHNS, R. L.

EDA. 609.—**Problems in Administration and Supervision.** 3 credits.
To arrange NRN 128 JOHNS, R. L.

EDA. 630.—**Individual Work.** 3 credits.
To arrange NRN 128 JOHNS, R. L.

EDA. 631.*—**Educational Leadership I.** 3 credits.
8:10 Daily NRN 311 AHRENS, M. R.; OLIVA, P. F.; HASS, G.

EDA. 632.*—**Educational Leadership II.** 3 credits.
9:20 Daily NRN 311 AHRENS, M. R.; OLIVA, P. F.; HASS, G.

EDA. 633.—**Methods and Problems of Supervision.** 3 credits. Prerequisite: EDA. 631 or ED. 634.
10:30 Daily NRN 207 COOPER, J. A.

EDUCATION—ELEMENTARY

EDE. 400.—**Problems of Instruction.** 3 credits.
10:30 Daily I 101 TISON, J.

The course in elementary curriculum required for certification to teach in grades 1-12 in certain specialized fields.

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*Credit assigned must be shown on course assignment card.

*Must be taken concurrently.

EDE. 550.—The Teaching of Arithmetic. 3 credits.
9:20 Daily NRN 209 OLSON, W.

The purpose of the course is to help teachers of elementary and junior high schools gain an understanding of arithmetic concepts, symbolism, and teaching materials and procedures.

EDE. 570.—Teaching of Reading. 3 credits.
8:10 Daily NRN 209 HAIMBACH, D.

A comprehensive survey of the problems of teaching reading in all grades and practical procedures for attacking these problems.

EDE. 600.—Elementary School Curriculum. 3 credits.
Section 1 10:30 Daily NRN 222 MURRAY, L. L.
Section 2 8:10 Daily NRN 226 MURRAY, L. L.

A survey of the content and methods of the elementary school curriculum. Offered primarily for students who have not taken a course in elementary curriculum and who have not had teaching experience in the elementary schools; also the first course in elementary curriculum for students majoring in administration.

EDE. 601.—Practices in Elementary Education, I. 3 credits.
10:30 Daily NRN 311 GREEN, E. K.

A study of practices in the elementary school in relation to fundamental principles of curriculum development. This is the basic elementary curriculum course for Master's program in Elementary Education.

EDE. 602.—Practices in Elementary Education, II. 3 credits.
Section 2 8:10 Daily NRN 105

Emphasis is placed upon an interdisciplinary approach to problems in social learnings of elementary children.

EDE. 603.—Early Childhood Education, I. 3 credits.
11:40 Daily NRN 209 MC CRACKEN, J.

To assist teachers of children of nursery school and kindergarten age.

EDE. 604.—Early Childhood Education, II. 3 credits.
To arrange NRN 205 MC CRACKEN, J.

Problems in working with children in the nursery school and kindergarten.

EDE. 635.—Supervision of Pre-Service Teachers, I. 3 credits. Open to graduate students with certification and background in elementary education, or permission of instructor.
9:20 Daily NRN 138 GREEN, E. K.

Problems and issues of pre-service teacher education, with particular emphasis on procedures of supervising interns.

EDE. 660.—Science Education in the Elementary School. 3 credits. Prerequisite: EDE. 560 or equivalent, or permission of instructor.
11:40 Daily NRN 142 BINGHAM, N. E.

Current problems in teaching science in elementary schools, new materials and techniques of teaching, recent developments in the sciences and their implications.

EDE. 671.—Language Arts in the Elementary School—Creative Expression. 3 credits.
10:30 Daily NRN 236 NESBITT, M.

Emphasis upon literature for young children and the arts related to it. These arts include illustrations, dramatization, puppetry, and other dramatic forms, story telling, creative writing, and evaluation and study of children's books in terms of their interests and needs.

EDE. 675.—Trends in the Teaching of Reading. 3 credits.
9:20 Daily NRN 236 NESBITT, M.

Analysis of trends in the teaching of reading as shown in current methods and research. Includes consideration of purposes and aims, skills and attitudes, informal and formal reading tests.

EDE. 703.—Seminar in Elementary Education, II. 3 credits.
8:10 Daily NRN 201 COOPER, J. and OLSON, W.

Opportunity (a) to make a critical examination of current research, (b) to cooperate with advanced students in other fields of education to provide an over-view of the total program in education, and (c) to work cooperatively on special projects. Staff course.

EDUCATION—FOUNDATIONS

EDF. 225.—Children and Culture. 3 credits.
Section 1. 8:10 Daily I 209 HILL, T.
Section 2. 10:30 Daily NRN 203 FERREE, G.

A study of education as a function of the social setting.

EDF. 245.—Human Growth and Development. 3 credits.
8:10 Daily NRN 207 GORDON, I.
(Reserve time for observation during the forenoon.)

Effects of physical growth, the family, peer relationships, and the school on the development of adequate personalities.

EDF. 300.—History of Education in the United States. 3 credits.
8:10 Daily I 201 POTTER, R.

The historical development of our schools is traced with the implications of this development for the role of today's schools in its broad economic, sociological and psychological significance.

EDF. 360.—Elementary Statistical Methods in Education. 3 credits.
2:00 Daily NRN 316 PHILLIPS, W.

Application of selected techniques to organization and interpretation of educational data.

EDF. 410.—Philosophy of Education. 3 credits.
9:20 Daily NRN 226 MUNTYAN, B.

A critical examination is made of various theories and philosophies of education, their relationships to the democratic principle, and their significance to the evolving system of education in the United States.

EDF. 440.—Dynamics of Human Development. 3 credits.
8:10 Daily NRN 222 LANDSMAN, T.
(Reserve time for observation during the forenoon.)

Growth and development of children into mature personalities.

EDF. 442.—Educational Psychology. 3 credits.
9:20 Daily NRN 222 LANDSMAN, T.
(Reserve time for observation during the forenoon.)

Application of psychological principles to the educative process; individual differences; principles of learning; transfer of training; the nature of reasoning.

EDF. 450.—Measurement and Evaluation in Education. 3 credits.
11:40 Daily NRN 226 LAIRD, D.

Study of basic principles and methods of measurement; evaluation of pupil learning in school.

GRADUATE COURSES

EDF. 600.—History of Education. 3 credits.
9:20 Daily NRN 203 POTTER, R.

Attempt is made to evaluate present-day education by tracing back to their beginnings such dominant factors as the teacher, the curriculum, the school plant, and the sources of support and control for schools.

EDF. 610.—Democracy and Education. 3 credits.
Section 1. 10:30 Daily NRN 105 WHEELER, J.
Section 2. 11:40 Daily NRN 203 MUNTYAN, B.

A study of the reciprocal relationships of democracy and education.

EDF. 620.—Socio-Economic Foundations of Education. 3 credits.
Section 1. 8:10 Daily I 101 WHEELER, J.
Section 2. 9:20 Daily NRN 203 LEWIS, H.

The socio-economic bases for education are comprehensively surveyed.

EDF. 641.—Educational Psychology—Personality Dynamics. 3 credits.
Section 2. 8:10 Daily NRN 214 COMBS, A.

An examination of the dynamics of behavior and its implication for education.

EDF. 642.—Educational Psychology—Problems. 3 credits.
8:10 Daily NRN 236 CUMBEE, C.

Individualized study of problems dealing with child development, adolescence, learning, and other areas of educational psychology.

EDF. 643.—Educational Psychology—Learning Theory. 3 credits.
7:00 Daily NRN 236 SPEARS, W.

Different theories of learning will be studied and evaluated. The student will be expected to make a synthesis of the implications of these theories for teaching.

EDF. 710.—Education and Moral and Spiritual Ideas. 3 credits.
11:40 Daily NRN 222 LEWIS, H.

Education as a moral enterprise.

EDF. 730.—World Trends in Education. 3 credits
10:30 Daily NRN 201 HETENYI, L.

A study of comparative educational systems.

EDF. 760.—Techniques of Research. 3 credits.
11:40 Daily NRN 316 SPEARS, W.

Training is given in identifying research problems, selecting and organizing useful means for research, methods of gathering data, and best practices for interpreting and reporting observed phenomena.

EDUCATION—PERSONNEL SERVICES

EDP. 300.—Principles and Practices for Teaching Exceptional Children. 3 credits.
Prerequisite: EDF. 245 or equivalent.
11:40 Daily NRN 101 MORGAN, A. E.

A study of exceptional children as commonly found in our schools. Consideration will be given to incidence, causes, diagnosis, agencies for referral, and recommended teaching procedures in respect to the blind, partially seeing, deaf, hard-of-hearing, speech defective, crippled, mentally retarded, mentally superior, and socially and emotionally disturbed children.

EDP. 500.—Materials and Methods for Teaching Slow Learners. 3 credits. Prerequisite: EDP. 300 or PSY. 312.
9:20 Daily NRN 105 HAIMBACH, D.

Programs will be constructed which will correlate skill subjects with the cores of interest. Curricular materials will be considered which can be used to teach children who are mentally handicapped at various maturation levels and in various situations. Classroom teachers would find this course helpful.

EDP. 504.—Therapeutic Care of Crippled Children. 3 credits. Prerequisite: EDP. 300 or PSY. 312.
8:10 Daily I 107 MORGAN, A. E.

Attention is given to the interpretation of medical and psychological reports, to rehabilitation through physical education, physical therapy, and occupational therapy, and to vocational guidance.

EDP. 600.—Teaching Exceptional Children. 3 credits. Prerequisite: EDP. 300 or PSY. 312.
8:10 Daily I 207 CUNNINGHAM, M.

An advanced course in the care, treatment and education of children with problems and handicaps.

EDP. 610.—Principles of Guidance. 3 credits. Prerequisite or corequisite: EDF. 641.
10:30 Daily NRN 214 STRIPLING, R. O.

An introduction to the field of student personnel work.

EDP. 611.—Occupational Information. 3 credits.
10:30 Daily NRN 101 JACOBSEN, E.

Methods of studying occupations; sources of information concerning employment conditions, job requirements, training facilities, occupational trends; evaluation of occupational literature; use of occupational information in counseling.

EDP. 612.—Techniques of Guidance. 3 credits. Prerequisite or corequisite: EDP. 612, EDF. 641, EDF. 450 or equivalent, or approval of instructor.
9:20 Daily NRN 101 STRIPLING, R. O.

A survey of the various techniques used by teachers and guidance specialists, with special reference to tests, records, and counseling.

EDP. 613.—Personnel Testing. 3 credits. Prerequisite: EDF. 360 or EDF. 450 or permission of instructor.
8:10 Daily NRN 101 JACOBSEN, E.

A study of typical aptitude tests and inventories used in personnel work, with assigned readings in test literature. Procedures for standardizing and validating tests will be considered, with emphasis on the evaluation of the various instruments for use in personnel work.

EDP. 614.—Case Studies in Counseling. 3 credits. Prerequisite: EDF. 641, EDP. 610, and EDF. 450 or equivalent.
12:50 Daily NRN 101 EWENS, P.

Competency is developed in the appraisal of diagnostic data obtained from case histories and in the application of counseling theory and techniques. Actual case records will be prepared, studied, and discussed in class.

EDP. 616.—Practicum in Counseling. 3 credits. Advanced written application for admission to the course is required. Must be taken concurrently with EDP. 617.
To arrange NRN 140 FORDYCE, J. W.

Experience in individual counseling will be provided under supervision.

EDP. 617.—Practicum in Counseling. 3 credits. Must be taken concurrently with EDP. 616.

To arrange NRN 140 FORDYCE, J. W.

EDP. 618.—The Organization and Administration of Guidance Programs. 3 credits. Prerequisite: EDP. 610, EDF. 641, EDF. 450.

11:40 Daily NRN 101 EWENS, P.

Methods of organizing and administering personnel programs in educational institutions.

EDUCATION—SECONDARY

EDS. 305.—The Secondary School Today. 3 credits.

Section 1. 9:20 Daily NRN 201 DAVIS, E. A.

Section 2. 11:40 Daily NRN 138 WHETSTONE, R. W.

Purposes and organization of the secondary school, curriculum, teacher's role, adolescent behavior and application of learning theory, guidance, classroom management, student activities, evaluation and reporting student progress, educational issues, and similar topics will be organized to help the student acquire certain basic competencies for teaching.

EDS. 550.—The Teaching of Mathematics in the Junior High School. 3 credits.

10:30 Daily NRN 316 PHILLIPS, W. B.

2 hours to arrange.

Consideration of problems of mathematics curriculum at the junior high school level, and approaches and materials for teaching various mathematics concepts.

***EDS. 585.—Foreign Languages in the Secondary School.** 3 credits. Prerequisite: In-service status as a teacher of foreign language.

10:30-11:30 Daily AND 5 MUELLER, T. H. and OLIVA, P. F.

General problems of language learning and problems peculiar to the teaching of foreign languages in high school and junior college. Historic methods of language teaching. Newer methods, including use of audio-visual materials.

GRADUATE COURSES

EDS. 600.—Foundations of Secondary School Curriculum. 3 credits.

9:20 Daily NRN 214 OLSON, C. M.

An analysis of the assumptions underlying the secondary school, the research on which present-day programs are based and the emerging patterns in secondary school curricula.

EDS. 601.—The Junior High School Curriculum. 3 credits.

9:20 Daily NRN 232 LOUNSBURY, J. H.

Teachers, principals, and supervisors are given an opportunity to analyze and to evaluate the curriculum offerings in the modern junior high school. Emphasis will be placed on developing a school program to meet the needs of early adolescents.

EDS. 602.—The Secondary School Curriculum. 3 credits.

8:10 Daily NRN 232 OLSON, C. M.

An analysis of the scope, functions, and types of secondary school curricula. Consideration will be given to criteria for judging the secondary school curriculum and ways of improving existing programs.

EDS. 603.—Community College Education. 3 credits.

Section 2. 9:20 Daily NRN 316 McGUIRE, V.

An analysis of the program and problems of the community college.

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*Must be taken concurrently with FLE. 400.

EDS. 611.—The Core Program in the Secondary School. 3 credits.
8:10 Daily NRN 138 WHETSTONE, R. W.

A study of the organization, the methods, and the materials used in core classes.

EDS. 620.—Teaching Office Machines. 3 credits.
9:20 Daily NRN 305 CREWS, J. W.
4 hours to arrange.

Methods of teaching the operation of machines commonly used in business offices.

EDS. 623.—Teaching Bookkeeping & Consumer Business Subjects. 3 credits.
10:30 Daily NRN 308 CREWS, J. W.

The Curriculum, materials, and methods of teaching bookkeeping, economics of business, business law, business arithmetic, economic geography, and business correspondence are studied.

EDS. 625.—Problems in Business Education. 3 credits.
10:30 Daily NRN 305 MOORMAN, J. H.

Areas of interest of students enrolled will be studied intensively. Problems in business education in Florida schools will be emphasized. Each student will prepare a written report of his study.

EDS. 635.—Supervision of Pre-Service Teachers, I. 3 credits.
10:30 Daily NRN 232 DURRANCE, C. L.

A study of the function of the directing teacher in the internship program and the problems and procedures of supervising the work of interns.

EDS. 640.—Social Studies in the Secondary School. 3 credits.
11:40 Daily NRN 201 DAVIS, E. A.

Consideration of the problems of teachers, supervisors, and principals in teaching social studies in grades seven through fourteen. Trends, basic principles, recent improvements in methods and materials will be emphasized. Each student will be given opportunity to develop understandings and skills in a special problem in the social studies.

EDS. 650.—Mathematics in the Secondary School. 3 credits.
10:30 Daily NRN 316 PHILLIPS, W. B.
2 hours to arrange.

Selection and use of resource materials in junior and senior high school mathematics; current problems in the teaching of mathematics; laboratory experiences in surveying, preparation of displays, construction of equipment, and examination of films and other types of materials.

EDS. 660.—Science in the Secondary School. 3 credits.
8:10 Daily NRN 142 BINGHAM, N. E.

Current problems in teaching science in secondary schools and junior colleges. New materials and techniques of teaching and recent developments in the sciences and their implications.

EDS. 670.—Language Arts in the Secondary School. 3 credits.
11:40 Daily NRN 232 McGUIRE, V.

Gives opportunity to principals, supervisors, graduate students, and in-service teachers to work on their own problems at the various levels in grades seven through fourteen. Present trends, basic principles, methods, and materials will be considered.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 306.—Vocational Education. 3 credits.
9:20 Daily 150 GARRIS, E. W.

The development, function, and scope of vocational education as provided for by the National Vocational Education Acts of Congress.

EDV. 671.—Adult Education in Agriculture. 3 credits.
10:30 Daily 150 GARRIS, E. W.

Adult education in agriculture will form the core of this course. The problems will involve the organization of classes, procedures in teaching, and evaluation.

ELECTRICAL ENGINEERING

EL. 211.—Introduction to Electrical Engineering. 3 credits. Corequisites: PS. 206, MS. 354.
10:30 Daily ENG 334

A course to provide sophomore students who are planning to enroll in the Department of Electrical Engineering with basic knowledge of fundamentals of electric, magnetic and dielectric circuits, and direct current methods of measurements.

EL. 342.—Elements of Electrical Engineering. 3 credits. The second half of the course EL. 341-342. Prerequisite: EL. 341.
9:20 Daily ENG 346

For engineering students not majoring in electrical subjects. Representation of alternating current by vectors and complex quantities; measurement of power in single phase and polyphase circuits; generation; transmission, and utilization of electrical energy; characteristics of a.c. machinery testing of a.c. equipment.

EL. 346.—Elementary Electronics. 4 credits. Prerequisite: EL. 361. Students taking EL. 346 will register for one lecture (Section 1 or 2) and one laboratory (Section 11, 12, or 13).
Section 1 8:10 Daily ENG 334
Section 2 9:20 Daily ENG 328
Section 11 12:50-4:10 M W ENG 427
Section 12 12:50-4:10 T Th ENG 427
Section 13 6:30-9:50 p.m. T Th ENG 427

Basic principles of electron-tubes and electron-tube circuits, vacuum tubes as circuit elements, amplifiers. Classroom and laboratory examples taken from the fields of telephone and radio communications, and electron instrumentation.

EL. 350.—Electrical Laboratory. 1 credit. The second half of the course EL. 349-350. Corequisite: EL. 342.
12:50-4:10 T Th ENG 230

A laboratory course for engineering students not majoring in electrical engineering. Experimental studies and test of alternating current circuits and apparatus.

EL. 362.—Electric Circuits. 4 credits. The second half of the course EL. 361-362. Prerequisite: EL. 361.
Students taking EL. 362 will register for one lecture (Section 1 or 2) and one laboratory (Section 11, 12, or 13).
Section 1 8:10 Daily ENG 328
Section 2 9:20 Daily ENG 334
Section 11 12:50-4:10 M W ENG 424
Section 12 12:50-4:10 T Th ENG 424
Section 13 6:30-9:50 p.m. M W ENG 424

EL. 493.—Electrical Design and Experimental Procedure. Variable credit.*
To arrange.

Special projects are studied and reports prepared thereon.

EL. 657.—Boundary Value Problems. 3 credits. Prerequisite: EL. 655
To arrange.

Method of solution of the partial differential equations of electrical engineering. (Laplace, Poisson, wave equation, heat flow) in various coordinate systems and subject to various types of boundary conditions.

EL. 691.—Special Topics in Electrical Engineering. Variable credit.*
To arrange.

Laboratory lectures, or conference covering specially selected topics in Electrical Engineering.

EL. 692.—Special Topics in Electrical Engineering. Variable credit.*
To arrange.

Laboratory, lectures, or conference covering specially selected topics in Electrical Engineering.

EL. 699.—Research and Master's Thesis. 0 to 6 credits.*

Directed research and writing. For students working for the master's degree. Credits cannot be used to reduce the total required for the degree.

EL. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

Directed research and writing. For students working for the doctor's degree. Credits cannot be used to reduce the total required for the degree.

ENGINEERING GRAPHICS

EGR. 181.—Engineering Drawing. 3 credits. Corequisite: MS. 105.
Section 1. 7:00 to 9:10 Daily and 1 two-hour period to arrange with instructor ENG 514
Section 2. 9:20 to 11:30 Daily and 1 two-hour period to arrange with instructor ENG 514

How to make and how to read engineering drawings.

EGR. 182.—Descriptive Geometry. 3 credits. Prerequisite: EGR. 181.
Section 1. 7:00 to 9:10 Daily and 1 two-hour period to arrange with instructor ENG 500.
Section 2. 9:20 to 11:30 Daily and 1 two-hour period to arrange with instructor ENG 500

Graphical representation of basic geometrical elements and the solution of related space problems.

EGR. 282.—Mechanism and Kinematics. 3 credits. Prerequisite: EGR. 182 Corequisite: PS. 205
Section 1. 8:10 M T W Th ENG 512
Laboratory 12:50 to 4:20 T Th ENG 518
Section 2. 9:20 M T W Th ENG 512
Laboratory 12:50 to 4:20 M W ENG 518

Revolving and oscillating bodies, link work, belts, pulleys, gears, and cams; trains of mechanisms and the velocities of moving parts.

*Credit assigned must be shown on course assignment card.

ENGINEERING MECHANICS

EM. 313.—Fluid Mechanics. 4 credits. Prerequisites: EM. 365, MS. 354
9:20 Daily ENG 440
Laboratory 2:00 to 5:20 T Th RLA 100

Mechanics of compressible and incompressible fluids. Special emphasis on viscosity effects. Bernoulli's theorem, surface and form resistance, impulse-momentum principles, lift and drag, laws of similarity and dimensional analysis. Study includes statics and dynamics, and the application of basic principles to the flow of fluids through measuring devices and pipes, and around immersed bodies.

EM. 365.—Engineering Mechanics-Statics. 3 credits. Prerequisites: PS. 205,ML. 182. Corequisite: MS. 354.
Section 1 8:10 Daily ENG 430
Section 2 9:20 Daily ENG 430
Section 3 10:30 Daily ENG 430

Principles of statics; resultants and equilibrium of co-planar force systems; resultants and equilibrium of space force systems; trusses containing two force members; structures containing three force members; friction; centroids; moments of inertia; Mohr's circle.

EM. 366.—Engineering Mechanics-Dynamics. 3 credits. Prerequisites: EM. 365, MS. 354.
Section 1 8:10 Daily ENG 440
Section 2 9:20 Daily ENG 428
Section 3 10:30 Daily ENG 440

Dynamics of particles and rigid bodies for rectilinear translation, curvilinear translation, rotation and plane motion; mass moment of inertia; work and energy; impulse and momentum.

EM. 367.—Strength of Materials. 3 credits. Prerequisites: EM. 365, MS. 354.
Section 1 9:20 Daily ENG 320
Section 2 10:30 Daily ENG 428
Section 3 11:40 Daily ENG 428

Tension, compression and shear, stresses and strains; combined stresses; Mohr's circle; riveted joints for pressure vessels and structural work; torsion; bending moments; stresses and deflection of beams; eccentric loading; columns.

ENGLISH

EH. 133.—Effective Writing. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
2:00 Daily D 120 BRADSHAW, P.
3:10 W

Designed to aid the student to present his ideas in writing which is not only accurate and clear but pleasing and attractive to the reader. Students are urged to do creative work.

EH. 134.—Contemporary Reading. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.
10:30 Daily AND 20 PENROD, J. A.

Designed to aid the student in planning for himself a well-rounded program in reading, which will serve to keep him abreast of the best in contemporary thought. Some time will be spent in introducing each student to the bibliography and writing in the area of his special professional interest.

EH. 201.—Introduction to World Literature. 3 credits. May be taken for credit without EH. 202. Prerequisite: C-3.
8:10 Daily AND 204 KIRKLAND, E. C.

An introductory course on the backgrounds of English language and literature, with readings from selected masterpieces of the ancient, medieval, and renaissance worlds, from Homer to Cervantes.

EH. 202.—Introduction to English Literature. 3 credits. The second half of the course EH. 201-202. May be taken for credit without EH. 201. Prerequisite: C-3.

10:30 Daily AND 204 BRYAN, R. A.

Readings and lectures in the great masterpieces of English literature. Selections chiefly from the work of Chaucer, Shakespeare, Milton, Swift, Pope, Wordsworth, Keats, and Browning.

EH. 209.—The Short Story. 2 credits. Prerequisite: C-3.

7:00 M T W Th AND 210 SPACKS, B. B.

The understanding and appreciation of the short story as a literary type. Lectures, readings.

EH. 215.—Introduction to American Literature. 3 credits. Prerequisite: C-3.

11:40 Daily AND 212 MILES, G. S.

A selection of major American writers from Benjamin Franklin to Robert Frost. Emphasis is placed on understanding and critical appreciation rather than on literary history.

EH. 255.—Business Communications. 3 credits. Prerequisite: C-3.

(Register for one section only.)

Section 1. 7:00 Daily AND 204 JONES, J. A.
Section 2. 9:20 Daily AND 204 MILES, G. S.
Section 3. 10:30 Daily AND 212 PITTMAN, J.
Section 4. 12:50 Daily AND 204 HUNTER, J. P.

Instruction and practice in giving short oral reports, dictating and writing the most generally used business letters, and planning and executing short written reports, in accordance with the standards of business usage. The student is introduced to business and professional publications, corporation and municipal reports, and other media of communication.

EH. 306.—Modern English Grammar. 3 credits. Prerequisite: C-3 and C-5.

(Register for one section only.)

Section 1. 9:20 Daily AND 210 COX, E. H.
Section 2. 11:40 Daily AND 210 COX, E. H.

A systematic review of current English grammar, including attention to functional aspects of sentence structure, punctuation, and other problems of the mechanics of composition.

EH. 365.—Contemporary Literature: Fiction. 3 credits. Prerequisite: C-3 and C-5.

9:20 Daily AND 212 PENROD, J. A.

The most important British and American writers of twentieth-century prose fiction, with major emphasis upon recent novelists.

EH. 402.—Shakespeare. 3 credits. Prerequisite: C-3, C-5, and one course in English or Speech.

10:30 Daily AND 210 ROBERTSON, C. A.

The great tragedies will be studied, notably **Hamlet, Othello, King Lear, Macbeth,** and **Antony and Cleopatra.**

EH. 480.—English in the Secondary School. 3 credits. Prerequisite: C-3, C-5, and one course in English.

8:10 Daily AND 212 DERRICK, C.

Designed to help teachers of English by (1) a review of the content, both the language and the literature, of secondary school English, with attention to some of the methods widely used in high school English courses, and (2) a study of both the ultimate and the immediate objectives of the secondary English program.

EH. 491.—Children's Literature. 3 credits. Prerequisite: C-3 and C-5.
(Register for one section only.)
Section 1. 9:20 Daily AND 20 BOONE, L. P.
Section 2. 12:50 Daily AND 212 OLSTEAD, M.

A course designed to arouse and satisfy a genuine interest in children's books apart from school text books, to aid the student to obtain a better working knowledge of this literature, and to make him more aware of degrees of excellence in content and form.

EH. 498.—Major Writers of the Victorian Era. 3 credits. Prerequisite: C-3, C-5, and one course in English.
8:10 Daily AND 210 RUFF, W.

Selections from the best works of such writers as Tennyson, Browning, Carlyle, Ruskin, Arnold, Dickens, and Thackeray.

EH. 501.—American Literature. 3 credits. May be taken for credit without EH. 502. Prerequisite: C-3, C-5, and one course in English.
11:40 Daily AND 204 BIGELOW, G. E.

A critical and historical survey of American literature from 1607 to 1865.

EH. 509.—Chaucer. 3 credits. Prerequisite: C-3, C-5, and one course in English
12:50 Daily AND 210 BOONE, L. P.

Reading and critical study of the Canterbury Tales.

GRADUATE COURSES

EH. 613.—The Rennaissance in England. 3 credits.
8:10 Daily LIB 404 BOWERS, R. H.

The origin of the movement in Italy and its spread in England; the 16th-century poets and prose writers.

EH. 630.—Individual Work. 3 credits. Prerequisite: 12 hours of English and approval of department head.
To arrange ROBERTSON, C. A.

Designed for graduate students needing work in subjects not available in currently offered courses. With change of content EH. 630 may be repeated for credit.

EH. 699.—Research and Master's Thesis. 0 to 6 credits.*

EH. 763.—Seminar in English Rennaissance Literature. 3 credits.
To arrange BOWERS, R. H.

EH. 771.—Seminar in Victorian Literature. 3 credits.
To arrange RUFF, W.

EH. 783.—Seminar in American Prose. 3 credits.
To arrange REID, A. S.

Subjects: American biography, autobiography, essay, and history; American criticism.

EH. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

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*Credit assigned must be shown on course assignment card.

ENTOMOLOGY

EY. 203.—Economic Entomology. 3 credits.
8:10 M T W Th MCC 343 HETRICK, L. A.
Laboratory: 12:50 to 3:00 M MCC 346

An introduction to economic entomology, which is based upon a study of the life histories, and control of major insect enemies of American agricultural crops. Particular stress is placed upon southern and Florida economic insects. This course is designed for all students in the College of Agriculture either as a pre- or corequisite for other entomology courses.
Textbook, "Destructive and Useful Insects" by Metcalf, Flint and Metcalf.

EY. 460.—Insect Identification. 3 credits.
10:30 T Th MCC 346 HETRICK, L. A.
Laboratory: 12:50 to 3:00 T Th MCC 346

A survey of immatures and adults of all orders. Identification of insects of all major families.
Textbooks, "Introduction to Entomology," by Comstock, and "How to Know the Immature Insects," by Chu.

GRADUATE COURSES

EY. 603.—Problems in Entomology. 1 to 4 credits.*
Hours to be arranged HETRICK, L. A.

A problem for study which may be selected in any field of entomological specialization; including Histology, Morphology, Physiology, Taxonomy, Embryology, Biological Control, Ecology, Toxicology, Plant Quarantine, Commercial Entomology, Life History and Habits, Biology, and Medical and Veterinary Entomology.

EY. 699.—Research and Master's Thesis. 0-6 credits.*
HETRICK, L. A.

Field or laboratory research of entomology problems. Results to be used in preparation of thesis.

FAMILY LIFE

FAM. 213.—The Child in the Home. 3 credits.
7:00 Daily AE 2 JOHNSON, H. H.
Laboratory To be arranged

A study of the child in relation to his home. Consideration of the responsibilities of parenthood. Factors affecting development. Emphasis upon the pre-school child. Observation and participation in the department's Child Study Center.

FAM. 301.—Family Relationships. 3 credits. Prerequisites: SY. 244 or PSY. 201 with Permission of Instructor.
7:00 AE 4 RONALDSON, A. S.

Personal and family relationships; guidance of the student in establishing successful family life patterns.

FAM. 400.—Seminar in Family Life. 3 credits. Prerequisites: FAM. 301, PSY. 308.
8:10 AE 4 ALBRECHT, R. E.

A coordination and integration of the student's work in the major program.

FAM. 430.—Individual Work. 3 credits. Prerequisites: FAM. 301 and permission of Head of Department.
To be arranged ALBRECHT, R. E.

With a change of content FAM. 430 may be selected for additional credits. To meet needs of students in areas not covered in regular course offerings.

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*Credit assigned must be shown on course assignment card.

FINANCE AND INSURANCE

FI. 260.—Fundamentals of Insurance. 3 credits.
9:20 Daily MAT 113

The basic fundamentals underlying the business of insurance as a prerequisite for more advanced and detailed work in the subject designed to serve two distinct needs: (1) to give students of economics and commerce a general knowledge of the subject; and (2) to lay a foundation for the future work of those interested in entering the business. Not open to students with 4BA classification.

FI. 363.—Life, Accident, and Sickness Insurance. 3 credits. Pre-requisite FI. 260 or consent of instructor.
11:40 Daily MAT 113

All types of policies issued by commercial carriers, with emphasis upon individual, family, and business needs; historical background and development, premium and reserve computations; types, organization, and operation of carriers; legal aspects of life insurance; regulation and control. Designed as basic course for students who may become either sellers or buyers of life insurance.

FI. 366.—Casualty Insurance and Corporate Suretyship. 3 credits. Prerequisite FI. 260.
8:10 Daily MAT 113 UNGER, M. A.

The principles and personal and business uses of casualty insurance. An analysis is made of workmen's compensation, liability, automobile, aviation, accident and health, theft, boiler and machinery, plate glass, and credit insurance.

FI. 422.—Investments. 3 credits. Prerequisite FI. 427.
9:20 Daily MAT 222 WILMOT, W. V., JR.

The nature of investments; investment policies and types of securities; analysis of securities; the mechanics and mathematics of security purchases; factors influencing general movements of security prices.

FI. 427.—Corporation Finance. 3 credits.
9:20 Daily MAT 114 FRAZER, W. J., JR.

The economic and legal forms of business enterprise; the instruments of business finance; financial problems as they relate to the ordinary operations of the business involving fixed and working capital, income, divident policy, and current borrowing.

GRADUATE COURSES

FI. 629.—International Finance: Monetary Systems. 3 credits.
8:10-11:00 T Th LIB 417 MATTHEWS, C. A.

International monetary systems with special emphasis on the role of central banks. Attention is concentrated on the inter-war period, the factors leading to the breakdown of international financial systems and attempts at reconstruction culminating in the World Bank and the International Monetary Fund.

FI. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange.

FOOD TECHNOLOGY AND NUTRITION

FT. 499.—Special Problems in Food Technology and Nutrition. 1-3 credits.* Open to seniors on consent of instructor.
To arrange.

Individual research work in various phases of food technology and nutrition.

GRADUATE COURSES

FT. 670.—Non-thesis Research in Food Technology and Nutrition. 1-6 credits.*

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*Credit assigned must be shown on course assignment card.

FT. 699.—Research and Master's Thesis. 0-6 credits.*

FOREIGN LANGUAGE

FLE. 230.—Individual Work in Foreign Languages. 3 credits. Prerequisite: Permission of the head of the department.
To arrange AND 3-B STAFF

By means of this course students may be permitted to elect the study of foreign languages for which there are no regular course offerings. Assurance of a sustained sequence in any of these languages cannot be given.

FLE. 400.—Foreign Language for Teachers. 3 credits. Prerequisite: In-service status as a teacher of a foreign language.
8:30 Daily AND 5 MUELLER, TH., BRUNET, J., MC ALISTER, L. N., OLIVA, P. F., WERSHOW, I. R., WIMBERLY, S. E.

Designed to offer help in all phases of instruction to in-service teachers of foreign languages. Intensive training to improve oral fluency in a foreign language and instruction in the cultural and behavior patterns of the foreign people will be given. As a summer workshop in cooperation with EDS. 585, will demonstrate the theory of audio-visual materials and the principles of linguistic science and language learning.

FORESTRY

FY. 221.—Summer Camp. 5 credits.
Field STAFF

Summer camp covers the entire field of forestry. Students receive field instruction in surveying, cruising, silviculture, and forest management.

FY. 228.—Forest Mensuration. 3 credits.
Field STAFF

NOTE: This course will be given in conjunction with FY. 221.

FY. 431.—Forest Problems Seminar. Variable Credit.*
To arrange STAFF

Supervised study and investigations in some particular phase of forestry or wildlife management.

GRADUATE COURSES

FY. 602.—Research Problems in Silviculture. 3 to 6 credits.*
To arrange.

Individual research on specific problem in silvics, forest tree seed, forest tree propagation, forest soils, forest ecology, and silvicultural practices.

FY. 603.—Research Problems in Wood Utilization. 3 to 6 credits.*
To arrange.

Individual research in wood technology, wood preservation, naval stores, small sawmill operation.

FY. 604.—Research Problems in Forest Economics and Management. 3 to 6 credits.*
To arrange.

Individual research in forest economics, forest finance, or forest management.

FY. 605.—Research Methods in Wildlife Management. 3 credits.
To arrange BECKWITH, S. L.

A detailed study of field and laboratory procedures used in wildlife research.

*Credit assigned must be shown on course assignment card.

FY. 606.—Research Problems in Wildlife Management. 3 to 6 credits.*
To arrange BECKWITH, S. L.

Individual problems in the field of wildlife management.

FY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

FRENCH

FH. 133.—First-Year French. 3 credits.
8:10 M T W Th AND 5 MUELLER, TH.
Laboratory: 10:30 Daily AND 11

FH. 134.—First-Year French. 3 credits. Prerequisite: FH. 133 or the equivalent.
9:20 M T W Th AND 13 WENNBERG, B.
Laboratory: 11:40 Daily AND 11

FH. 201.—Second-Year French. 3 credits. Prerequisite: FH. 134 or the equivalent.
8:10 M T W Th AND 13 WENNBERG, B.
Laboratory: 10:30 Daily AND 11

FH. 202.—Second-Year French. 3 credits. Prerequisite: FH. 201 or the equivalent.
7:00 M T W Th AND 13 WALLACE, M. J.
Laboratory: 11:40 Daily AND 11

FH. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college French or the equivalent.
To arrange AND 3-B WALLACE, M. J.

GRADUATE COURSES

FH. 630.—Individual Work. 3 credits.
To arrange AND 3-B STAFF

FH. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AND 3-B STAFF

FRUIT CROPS

FC. 499.—Special Problems in Fruit Crops. 1 to 3 credits.
To arrange.

Open to Fruit Crops seniors on consent of instructor. Individual research work in various phases of fruit production.

GRADUATE COURSES

FC. 670.—Non-thesis Research in Fruit Crops. 1 to 6 credits.*
To arrange.

FC. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

FC. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange.

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*Credit assigned must be shown on course assignment card.

GENERAL SCIENCE

GL. 301.—Elementary School Science. 3 credits.
10:30 Daily NRN 142 SHECKLES, M.

The role of science in the development of elementary school children. Experience with the content, materials, and approaches of elementary school science.

GL. 302.—Elementary School Science. 3 credits.
8:10 Daily NRN 150 SHECKLES, M.

A continuation of GL. 301, emphasizing field and laboratory work in the various areas of science.

GEOGRAPHY

GPY. 200.—Introduction to Geography. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily FLO 204 MARCUS, R. B.
Section 2. 10:30 Daily FLO 204 MARCUS, R. B.

A study of the relationships between population, human activities and the physical world.

GPY. 382.—Principles of Resource Utilization (Identical with ES. 382). 3 credits.
Prerequisite: GPY. 200.
9:20 Daily FLO 204 VARNEY, C. B.

A comprehensive review of the natural and human resources of the United States followed by an intensive study of the wise and wasteful practices of exploitation and utilization of these resources. A study of the human and economic significance of the principles of conservation with special reference to the South. Course designated to satisfy resource certification for social studies teachers.

GPY. 430.—Individual Work. 3 credits.
To arrange.

Qualified undergraduate students and the instructor concerned may choose a particular topic or problem for study. May be repeated for full credit with change of content.

GPY. 490.—Field Course in Resource Utilization. 3 credits. Prerequisite: GPY./ES. 382.
7:00 T Th FLO 204 VARNEY, C. B.
Field trips to arrange.

An integrated study of the problems of local resources and their use in a designated unit area, such as a county or a city. The course consists of a combination of class work and field work. Two class periods per week and the equivalent of five one-day field trips.

GRADUATE COURSES

GPY. 600.—Field Course in Geography. 6 credits.
To arrange DYER, D. R.

Methods of geographical field work. Observation, classification, interpretation, note taking, traversing and mapping of data. Areal analysis; land forms, climate, vegetation, soils, resources, settlement patterns and land use. Required of all candidates for graduate degrees in geography.

GPY. 630.—Individual Work. 3 credits.
To arrange.

A reading or research course in such areas of geography as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

GPY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

*Variable. Credit assigned must be shown on course assignment card.

GPY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange.

GEOLOGY

GY. 203.—Elements of Physical Geology. 3 credits.
9:20 M T W Th FLO 209 RAPPENECKER, C.
Laboratory: 2:00 to 4:10 M W FLO 209

A study of minerals and rocks and their formation, geological processes, land forms and their interpretation, and the applications of geological knowledge to human affairs.

GY. 430.—Individual Work. 3 credits.
To be arranged RAPPENECKER, C.
Prerequisite: Permission of Instructor.

Subject matter to be determined.

GERMAN

GN. 133.—First-Year German. 3 credits.
7:00 M T W Th AND 6 VALK, M. E.
Laboratory 10:30 Daily AND 11

GN. 134.—First-Year German. 3 credits. Prerequisite: GN. 133 or the equivalent.
8:10 M T W Th AND 6 JONES, O. F.
Laboratory: 11:40 Daily AND 11

GN. 201.—Second-Year German. 3 credits. Prerequisite: GN 134 or the equivalent.
7:00 M T W Th AND 18 JONES, O. F.
Laboratory: 10:30 Daily AND 11

GN. 202.—Second-Year German. 3 credits. Prerequisite: GN 201 or the equivalent.
10:30 M T W Th AND 18 VALK, M. E.
Laboratory: 11:40 Daily AND 11

GN 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college German or the equivalent, and permission of the head of the department.
To arrange AND 3-B STAFF

GRADUATE COURSES

GN. 630.—Individual Work. 3 credits.
To arrange AND 3-B STAFF.

GN. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AND 3-B STAFF.

HISTORY

HY. 201.—History of World Civilizations to 1550. 3 credits.
8:10 Daily PEA 112 PAYNE, A. N.

Analysis of the civilization and cultures antecedent to the modern civilization of the Western World designed to give an understanding of the chronology, development and meaning of human history from its oriental origins thru Classical Antiquity, the Byzantine and Islamic traditions, Medieval and Rennaisance Europe to the Protestant Reformation.

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*Credit assigned must be shown on course assignment card.

HY. 246.—United States History, 1865 to the Present. 3 credits.
9:20 Daily PEA 112 BARINGER, W. E.

Reconstruction, the Age of Big Business, the United States as a world power, World War I, the great depression and the New Deal, World War II and its aftermath will be studied in an interpretative survey.

HY. 335.—English History to 1689. 3 credits. Prerequisites: C-1 or equivalent and 6 additional hours of social sciences.
10:30 Daily PEA 112 PAYNE, A. N.

A survey of English History from early times to the Glorious Revolution with emphasis on Medieval England, the rise of the state, the Tudor and Stuart periods and the economic and political developments.

HY. 549.—Civil War and Reconstruction. 3 credits. Prerequisites: C-1 or equivalent and 12 additional hours of social sciences.
10:30 Daily PEA 114 BARINGER, W. E.

The causes, course and results of the sectional struggle in the United States; the economic and social significance of Civil War and Reconstruction in the nation.

HY. 599.—Special Study in History. 3 credits. Prerequisite: Permission of the Instructor.
To arrange STAFF

GRADUATE COURSES

HY. 630.—Individual Work. 3 hours.
To arrange STAFF

A reading or research course in such areas of History as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

HY. 699.—Research and Master's Thesis. 0 to 6 credits.
To arrange.

HY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.
To arrange.

INDUSTRIAL ARTS

IN. 300.—Machine Woodwork. 3 credits.
8:10-10:20 Daily NRN 20 NEUBAUER, G. W.

Power machinery and machine maintenance, and use of the jointer, tilting arbor saw, band saw, lathe, mortiser, drill press, router, shaper, and other machines.

IN. 330.—Elementary Handcrafts. 3 credits.
8:10-10:20 Daily NRN 304B MASSEY, H.

Creation of simple projects in such media as leather, textiles, clay, reed, plastics, lineoleum block, metal, wood, and native material.

IN. 331.—Handcrafts. 3 credits.
12:50-3:00 Daily NRN 304B MASSEY, H.

Major areas include leather carving and tooling, metal etching, wood carving, pottery, plastics, and textiles.

IN. 440.—Industrial Arts Laboratory. 3 credits.
To arrange NRN 300 STRICKLAND, T. W.

For advanced undergraduate students. Extension of work in one of the certification areas in industrial arts.

GRADUATE COURSES

IN. 623.—School Shop Planning. 3 credits.
10:30 Daily NRN 302 NEUBAUER, G. W.

Design of school shops, including selection and placement of equipment.

IN. 624.—Problems in Industrial Arts and Vocational Education. 3 credits.
8:10 Daily NRN 302 STRICKLAND, T. W.

Seminar for advanced students.

IN. 625.—Advanced Industrial Arts Design. 3 credits.
11:40 Daily NRN 302 MEYER, H. K.

Laboratory design practice in various media.

INDUSTRIAL ENGINEERING

IG. 371.—Job Analysis and Evaluation. 2 credits. Prerequisite: Upper Division classification.
Section 1. 9:20 M T W Th ENG 324
Section 2. 11:40 M T W Th ENG 324

Analysis of the mental and physical requirements, responsibilities and working conditions of jobs and the several systems of determining the relative worth of jobs. Wage determination. Job evaluation plan installation and maintenance. Merit rating.

IG. 460.—Engineering Economy. 3 credits. Prerequisite: Engineering Classification.
Section 1. 7:00 Daily ENG 324
Section 2. 10:30 Daily ENG 324

The economic aspect of technical projects; the importance of alternative solutions being selected through economy, intangible and financial analysis stressed. "Will it pay?" and "Can it be financed?" Questions are analyzed from the engineering and management viewpoints. Lectures, discussions, and the solution of problems.

IG. 463.—Specifications, Contracts, Ethics and Industrial Safety. 3 credits. Prerequisite: Engineering classification.
Section 1. 7:00 Daily ENG 343
Section 2. 8:10 Daily ENG 324
Section 3. 9:20 Daily ENG 343

Specifications writing for materials and construction of engineering projects; advertising and letting of contracts, agreements and contractual relations. Engineering ethics. Organization of safety work in industry; accident causes and legal responsibility of employer and employee.

IG. 472.—Human Engineering. 2 credits. Prerequisite: Engineering classification.
Section 1. 8:10 M T W Th ENG 343
Section 2. 10:30 M T W Th ENG 343

Human nature in design and production problems. Consideration of the human element in the design of equipment and processes, as well as human reactions to plant situations.

IG. 699.—Research and Master's Thesis. 0 to 6 credits.
To be arranged.

INTER-AMERICAN STUDIES

IA. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange.

IA. 799.—Research and Doctoral Dissertation. 1-6 credits.*
To arrange.

JOURNALISM

JM. 430.—Individual Problems in Journalism. 3 credits. Prerequisite: At least 15 hours of Journalism in the Upper Division and approval of the Director.
To arrange.

Designed for seniors in their graduating semester. Students and the instructor concerned will choose a problem or project which will give the student actual experience in his major field.

JM. 509.—Law of the Press and Radio-Tv. 3 credits. Prerequisite: COM. 201 or permission of instructor.
8:10 Daily STA 336 CUNNINGHAM, H. W.

How to avoid legal difficulties in journalistic activities, with special attention to provisions of Florida law relating to Journalism and Radio-TV.

JM. 515.—Journalism in Secondary Schools. 3 credits. Prerequisite: Senior standing or permission of the instructor.
2:00-4:30 Daily STA 223 CUNNINGHAM, H. W.

This course is designed for persons who plan to teach Journalism in secondary schools or act as faculty advisers for school newspapers, magazines or yearbooks. It includes a general survey of the editorial, business, publishing and mechanical phases of school publications with emphasis on those aspects which are of particular value to teachers. The course will include field trips and laboratory exercises.

GRADUATE COURSES

JH. 616.—Seminar in Journalism Teaching. 3 credits.
2:00-4:30 Daily STA 223 CUNNINGHAM, H. W.

Research and advanced training for teachers of Journalism and supervisers of publications in the public schools.

JM. 630.—Individual Work. 3 credits.
To arrange.

JM. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

LATIN

LN. 105.—The Latin Element in English. 2 credits.
9:20 M T W Th AND 4 BRUNET, J.

LN. 430.—Individual Work. 3 credits.
To arrange AND 3-B BRUNET, J.

GRADUATE COURSE

LN. 630.—Individual Work. 3 credits.
To arrange AND 3-B BRUNET, J.

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*Credit assigned must be shown on course assignment card.

LAW

NOTE: The schedule of the College of Law differs in time from that of the other divisions of the University.

LW. 404.—Criminal Law & Procedure II. 2 credits.
1:00-2:10 M T W LAW 201 CLARK, V. W.

A continuation of LW. 403. Also: defenses in criminal prosecutions; Federal Rules of Criminal Procedure and their construction.

LW. 406.—Introduction to Public Law. 3 credits.
8:00-9:10 Daily LAW 201 KENDALL, A. V.

Nature of constitutional government; problems of dual sovereignty; analysis of the legislative, executive, judicial and administrative functions of government; Supreme Court jurisdiction and procedural steps related to review; the legislative process and interpretation of statutes; the role of the executive branch; implied powers; problems of delegation; interstate and foreign commerce; federal taxing and spending; procedural and substantive due process; fundamentals of administrative law.

LW. 410.—Estates & Trusts I. 3 credits.
10:40-11:50 Daily LAW 201 PLAGER, S. J.

The substantive law of intestate succession, execution of wills, making of gifts inter vivos and causa mortis, and creation non-commercial trusts.

LW. 501.—Commercial Transactions I. 3 credits.
10:40-11:50 Daily LAW 203 DELONY, D.

An integrated study of the law applicable to commercial transactions, with emphasis on the distribution of goods, the issuance and negotiation of commercial paper, and the means by which transactions are secured, such as, conditional sales, chattel mortgages, liens, pledges, and contracts of suretyship.

LW. 503.—Business Organizations. 3 credits.
8:00-9:10 Daily LAW 203 JONES, E. M.

Creation of business associations, including corporations; rights and liabilities, both to each other and to third persons, arising from the relationship of master-servant and principal-agent, considered in the context of such associations; partnership property and rights of partnership creditors contrasted with rights of creditors of individual partners; termination and dissolution of partnership.

LW. 554.—Estates & Trusts II. 2 credits.
9:20-10:30 M T 1:00-2:10 Th LAW 104 MACDONALD, W. D.

Protection of the family of the transferor; admissibility and effect of extrinsic evidence; ademption, lapse and satisfaction; revocation of wills; termination of trusts.

LW. 574.—Advanced Equity. 2 credits.
1:00-2:10 M T W LAW 203 HOYT, B. P.

Specific performance: nature of jurisdiction, the statute of frauds, part performance; rescission and reformation; equitable relief against unjust situations at law, including interpleader, accounting, bills quia timet, bills of peace, and class suits.

LW. 605.—Income Taxation. 2 credits.
10:40-11:50 W Th F LAW 104 STEPHENS, R. B.

The fundamentals of federal income taxation; techniques of federal tax research.

LW. 612.—Legal Ethics. 1 credit.
8:00-10:00 p.m. T To arrange MAUTZ, R. B.

Responsibilities of the legal profession; Canons of Ethics of the American Bar Association; organization of the bar; current problems and activities of the legal profession.

LW. 632.—Creditor's Rights. 3 credits.
8:00-9:10 Daily LAW 304 FREELAND, J. J.

Alternative remedies available to the unsecured creditor; conveyances in fraud of creditors; state insolvency proceedings and adjustment by agreement between debtor and creditors; the Federal Bankruptcy Act.

LW. 641.—Judgments & Appeals. 2 credits.
9:20-10:30 M T 2:20-3:30 T LAW 201 YONGE, P. K.

Analysis of the judgment; methods of review in Florida and federal practice; notice; assignments of error; record; technique of appellate briefing and oral argument; factors in estimating advisability of seeking review.

LW. 642.—Federal Jurisdiction. 2 credits.
9:20-10:30 W Th F LAW 201 ENWALL, H. O.

Federal judicial system; civil jurisdiction; limitations on jurisdiction; application of state law; exclusive jurisdiction; concurrent jurisdiction; federal questions; diversity of citizenship; collusion among parties; judicial re-arrangement of parties; jurisdictional amount; joinder of separate claims; removal of suits from state courts; separable controversies; ancillary proceedings.

LW. 653.—Mortgages. 2 credits.
8:00-9:10 W Th F LAW 104 HOYT, B. P.

Real property mortgages: problems of creation; assignment; priorities; rights and duties of the parties; merger; foreclosures.

LW. 661.—Administrative Law. 2 credits.
9:20-10:30 M T 2:20-3:30 T LAW 203 STEPHENS, R. B.

Analysis of the administrative process with emphasis on: the reason for and validity of delegation; constitutional, statutory, judicial and agency-made rules of administrative procedure; methods and scope of judicial review of administrative action.

LW. 665.—Municipal Corporations. 2 credits.
10:40-11:50 M T 2:20-3:30 W LAW 104 KRASTIN, K.

Legal problems encountered in the conduct of government at the local level, principally municipal; types and nature of local units, their place in the governmental structure, their organization, personnel, powers, procedure, means of financing, and limitations; community planning.

LW. 667.—Trade Regulations. 2 credits.
9:20-10:30 W Th F LAW 104 KRASTIN, K.

Common law and statutory regulation of trade and industry; the restraint of trade and anti-trust laws.

LW. 672.—Damages. 2 credits.
8:00-9:10 M T 2:20-3:30 M LAW 104 ENWALL, H. O.

General principles; non-compensatory damages; forseeability; certainty; avoidable consequences; interest; value; problems dealing with specific wrongs, including torts and breach of contract; liquidated damages.

LW. 681.—Crime & Criminology Seminar. 2 credits.
8:00-9:10 W Th F LAW 120 CLARK, V. W.

Causes and prevention of crime; juvenile delinquency and the juvenile courts; probation and parole; crime detection and police methods; crime commissions; psychiatry and psychology in criminal law; trends in criminal court administration and penology; a study of the jury and the court in a criminal case; ethics in the practice of criminal law.

LW. 690.—Law Review. 1 credit.
To arrange MAUTZ, R. B.

Research, writing and editorial work in connection with the publication of **University of Florida Law Review.** Limited to students who have completed LW 408 (or qualified transfer students) and whose average in all law courses attempted is at least 2.0 at each time law review work is undertaken.

LW. 691.—Advanced Legal Research. Variable credit.
To arrange MAUTZ, R. B.

A specific attempt to relate the study of law to practice by modeling instruction upon law office methods. The program is conducted as individual projects. Current problems which are submitted by attorneys throughout the state, are used when available. The student is required to do individual research and to present his findings in the form of a legal memorandum. Emphasis is upon individual work and responsibility.

LW. 692.—Legal Philosophy. 1 credit.
8:00-10:00 p.m. W LAW 104 MACDONALD, W. D.

The interrelation of justice and law; views of great philosophers on law as one aspect of their philosophical systems; schools of legal thought; methodology of the judiciary; analysis of assumptions made in formulating familiar doctrines in the law. Each student leads a discussion and submits an original essay. Preference given sixth-semester students when enrollment exceeds seminar size; fifth-semester students should check with instructor before enrolling.

LW. 694.—Current Legal Problems Seminar. 2 credits.
9:20-10:30 W Th F LAW 203 YONGE, P. K.

Exploration of various legal problems of current significance leading to creative work on the part of the student in the form of a term paper.

LIBRARY SCIENCE

LY. 302.—Basic Reference Materials. 3 credits. Prerequisite: LY. 301.
9:20 Daily LIB. 455 ALEXANDER, A. E.

A study of the basic types of reference materials—encyclopedias, dictionaries, yearbooks, periodical indexes, bibliographies—with practice in the use of these materials toward a better understanding of basic research procedures.

LY. 304.—Organization of Library Materials. 3 credits.
10:30 Daily LIB 455 PRINCE, V. C.

Classroom and laboratory practice in the basic procedures of acquisition, preparation and processing of materials for library service in relation to the school and other agencies which the library serves.

LY. 321.—School Library Administration. 3 credits.
11:40 Daily LIB 455 FRANCIS, E. S.

Study of effective organization and administration of the school library through which the librarian contributes to the development of the total school program.

MANAGEMENT AND BUSINESS LAW

MGT. 271.—Principles of Management. 3 credits.
8:10 Daily MAT 112 BELOTE, A.

The basic fundamentals of management underlying the solution of problems of organization and operation of business enterprises. Application of these fundamentals to specific fields of industrial management such as production, material, personnel, purchasing, etc. Not open to students with 4BA classification.

MGT. 373.—Personnel Management. 3 credits.
Section 1. 8:10 Daily MAT 108 THOMSON, N. B.
Section 2. 10:30 Daily MAT 108 BELOTE, A.

A comparison of and critical evaluation of public and private personnel practices and techniques of recruiting, selecting, transferring, promoting, classifying and training workers. Attention is centered on the problem of training to fit workers for the different types and levels of duties called for by the government, by industry and by other types of business enterprises. Consideration of organization, policies, and procedures of managing men.

MGT. 401.—Business Law. 3 credits.
Section 1. 8:10 Daily MAT 213 WYATT, J. W.
Section 2. 10:30 Daily MAT 112 UNGER, M. A.

Contracts: Nature; kinds; agreement; genuineness of assent; consideration; legality; capacity; third parties; discharge; remedies. Agency: Nature; creation; principal and agent; rights and liabilities of third parties; termination. Negotiable Instruments: Nature; kinds; parties; transfer; holders; defenses; discharge. Sales: Nature; formality; transfer of title; warranties; liabilities; rights; remedies; conditional sales.

MGT. 402.—Business Law. 3 credits. Prerequisite: MGT. 401.
9:20 Daily MAT 108 WYATT, J. W.

Personal Property: Nature; classification; acquisition of title. Bailments: Nature; classification; termination; pledges and pawns. Carriers: Nature; classification; duties; liabilities. Sales: Nature; formality, transfer of title; warranties; liabilities; rights; remedies; conditional sales. Corporations: Nature; creation; classifications; powers; stock; management; rights; liabilities. Partnership: Nature; creation; duties; rights; remedies; liabilities. Agency: Nature; creation; principal and agent; rights and liabilities of third parties; termination.

MGT. 471.—Principles of Organization. 3 credits.
11:40 Daily MAT 114 FOX, W. M.

Includes coordinative, scalar, functional and staff phases of government, military, church and finally industry whose internal and external problems are considered in their application to leadership.

GRADUATE COURSES

MGT. 676.—Managerial Controls. 3 credits.
To arrange FOX, W. M.

Concerns methods and procedures for regulating and checking management activities, in order to channel their operations within the requirements of predetermined plans. Covers controls as the guiding factors of industry as applied to both administrative and operative functions.

MGT. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange.

MARKETING

MKG. 231.—Principles of Marketing. 3 credits. Prerequisite: ES. 201.
9:20 Daily MAT 9 BUTTERWORTH, J. D.

The institutions and methods developed for carrying on trade operations retail and wholesale agencies; elements of marketing efficiency; the cost of marketing; price maintenance; unfair competition; the relation of the government to marketing. Not open to students with 4BA classification.

MKG. 233.—Salesmanship. 3 credits.
11:40 Daily MAT 9 GOODWIN, F.

An introduction to selling. Analysis of types, stages and problems of psychology of Sale situations. Not open to students with 4BA classification.

MKG. 333.—Advertising. 3 credits.
8:10 Daily MAT 116 SIMS, G. R.

A comprehensive guide to the planning and preparation of modern advertising in all of its phases.

MKG. 334.—Sales Management. 3 credits. Prerequisites: MKG. 231, MKG. 233.
10:30 Daily MAT 9 GOODWIN, F.

The selection and training of salesmen.

MKG. 437.—Retailing. 3 credits. Prerequisite: MKG. 231.
9:20 Daily MAT 116 SIMS, G. R.

The fundamentals of retailing: problems, policies, trends and procedures in retail distribution.

MKG. 459.—Field Work in Marketing. Variable Credit.
To arrange BUTTERWORTH, J. D.

Up to three credit hours for weekly reports and a final report on problems as they arise in a full time three months period of work in Sales, Retailing, Advertising, Wholesaling, Credit and Collections, Market Research, or other work in Marketing under supervision of an approved employer. Open only to students majoring in Marketing, Sales, Retailing, or Advertising curricula only before the last term on the campus, only after completion of a course in the principles of the subject to be practiced, and only with written permission from a sponsoring professor. Complete course regulations may be secured from sponsoring professor. All registrations in this course are subject to these regulations.

GRADUATE COURSES

MKG. 630.—Individual Work. 3 credits. Prerequisite: Permission of Department.
To arrange STAFF

A reading and/or research course in the several areas of marketing as needed by graduate students. May be elected for full credit in subsequent semesters with change of content.

MKG. 699.—Research and Master's Thesis. 0-6 credits.*
To arrange.

MATHEMATICS

MS. 105.—Basic Mathematics. 4 credits. Prerequisite: C-42, except for the superior group in mathematics.
(Register for one section only.)
Section 1. 7:00 Daily and 2:00 M W WAL 308
Section 2. 8:10 Daily and 2:00 T Th PEA 4
Section 3. 9:20 Daily and 2:00 M W PEA 4

In place of the traditional college algebra, trigonometry, and analytic geometry in succession, this course offers a sequence of topics including much of the above and some calculus. Thus the student will obtain early a working knowledge of such mathematics as is basic to the study of the sciences and other subjects. The choice of material is so made as to present mathematics as an integrated whole rather than as a series of segregated topics.

MS. 106.—Basic Mathematics. 4 credits. The second half of the course MS. 105-106.
(Register for one section only)
Section 1. 7:00 Daily and 2:00 M W WAL 202
Section 2. 8:10 Daily and 2:00 T Th WAL 308
Section 3. 9:20 Daily and 2:00 T Th WAL 209

MS. 208.—Business Mathematics. 3 credits. Prerequisite: C-42, except for the superior group in mathematics. Not open to students who have had MS. 308, and not counted toward a mathematics major in the College of Arts and Sciences.
(Register for one section only.)
Section 1. 7:00 Daily WAL 307
Section 2. 10:30 Daily WAL 307

Arithmetical, and some algebraic, treatment of the mathematical problems involved in business. Simple interest. Simple, bank, and trade discounts. Promissory notes, drafts, compound interest and related problems, partial payment, annuities, amortization, and other topics of the mathematics of business are treated.

MS. 300.—Mathematics for Elementary Teachers. 3 credits. Prerequisite: C-42, or some elementary teaching experience.
10:30 Daily WAL 213

This course is designed for teachers and prospective teachers of mathematics in grades through 6. It is not open to students who have completed more than two semesters of college mathematics. It deals with the fundamental notions of the mathematics taught in the elementary grades.

MS. 310.—Statistical Methods. 3 credits. Prerequisite. MS. 106, MS. 309 or its equivalent.

10:30 Daily WAL 209

Presents the bases of the various procedures as well as practical computational methods. The statistics of frequency distributions; moments; normal curve; curve fitting; regression and correlation analysis. Introduction to Chi-square, Student's t, and the F distributions.

MS. 325.—Advanced General Mathematics. 3 credits. Prerequisite: C-42.

9:20 Daily WAL 213

Continuation of the arithmetic and algebraic topics of elementary general mathematics with new material added. The deeper meaning of laws underlying number operations. Some properties of positive whole numbers. Higher functional analysis. Valuable to prospective teachers of mathematics and others who wish to continue some mathematical work without becoming specialists in pure mathematics.

MS. 326.—Advanced General Mathematics. 3 credits. Prerequisite: C-42.

8:10 Daily WAL 207

The facts and processes of elementary Euclidean geometry, with the study of numerous generalizations of theorems and the manner in which geometry, algebra, trigonometry and analytic geometry are related. The nature of proof. Types of proof. Problems in geometric construction. Inequalities. The locus idea treated both synthetically and analytically. Valuable to prospective teachers and to other students majoring in mathematics.

MS. 327.—Advanced General Mathematics. 3 credits. Prerequisite: MS. 325.

11:40 Daily WAL 102

The general processes pursued in MS. 325 are continued, with special emphasis on analysis. The analytic treatment is applied extensively to algebraic, exponential, logarithmic, geometric, and trigonometric functions. The informal notions of the derivative and integral introduced in MS. 325 are applied throughout the course and extended as needed. Mathematics is presented throughout as a single whole, both in its effect on the material side of civilization and as a creative force in its own right. The sequence C-42, MS. 325, and MS. 327 constitutes a cultural approach to formal courses in the calculus.

MS. 353.—Differential Calculus. 4 credits. Prequisite: MS. 106 or 327.

(Register for one section only.)

Section 1. 8:10 Daily and 2:00 M W WAL 307
Section 2. 9:20 Daily and 2:00 T Th WAL 211
Section 3. 10:30 Daily and 2:00 T Th WAL 202

Differentiation and integration. Typical problems solved by these methods are calculation of rates of change, computation of areas, volumes, moments of inertia, energy, power, and many others. Various advanced topics of special value to engineers and scientists. Open to University College students.

MS. 354.—Integral Calculus. 4 credits. The second half of the course MS. 353-354. Prerequisite: MS. 353 or its equivalent.

(Register for one section only.)

Section 1. 8:10 Daily and 2:00 M W WAL 209
Section 2. 9:20 Daily and 2:00 T Th WAL 307
Section 3. 10:30 Daily and 2:00 M W WAL 211

MS. 400.—Mathematics for Senior High School Teachers. 3 credits. Prerequisite: One full year of college mathematics and experience in teaching mathematics at the secondary level.

11:40 Daily PEA 4

This is designed for in-service teachers who desire either to refresh themselves in the standard materials of senior high school mathematics or to obtain enrichment background in the more recent subject-matter materials.

MS. 405.—Theory of Equations. 3 credits. Prerequisite: MS. 106 or 327.
11:40 Daily WAL 207

Theorems and methods of solution of equations of higher degree. Various methods of approximating solutions of numerical equations. Determinants; systems of linear equations. Symmetric functions. Elimination, resultants, and discriminants.

MS. 411.—Survey of Modern Algebra. 3 credits. Prerequisite: MS. 106 or 327.
9:20 Daily WAL 102

An introduction to the simpler concepts of higher algebra. Number system, number theory, groups, rings, ideals, integral domains, fields, matrices, etc.

MS. 420.—Differential Equations. 3 credits. Prerequisite: MS. 354.
7:00 Daily WAL 213

The classification, solution and application of various equations which contain expressions involving not only variables, but also the derivatives of these variables. Not open for credit to students who have taken MS. 521.

MS. 430.—Individual Work. 3 credits. Prerequisite: MS. 354 and permission of Head of Department.
To be arranged.

For undergraduate work needed by the student and not obtainable in the regular course offerings.

MS. 431.—College Geometry. 3 credits. Prerequisite: MS. 326 or its equivalent.
8:10 Daily WAL 211

The use of elementary methods in the advanced study of the triangle and circle. Special emphasis on solving original exercises. Valuable to prospective high school and college geometry teachers.

MS. 501.—Introduction to Mathematical Thought. 3 credits.
11:40 Daily WAL 211.

The anatomy of mathematics. The axiomatic method. Theory of sets. Transfinite arithmetic. The linear continuum and the real number system. Groups and their significance. Generalizations of classical mathematics. Mathematical philosophies.

MS. 510.—Mathematical Statistics. 3 credits.
10:30 Daily WAL 301

A study of the binomial distribution, DeMoivre-Laplace theorem, distribution functions and moment-generation functions; frequency distribution of two variables; development and some applications of the Chi-square, Student's t and F distributions.

MS. 521.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 354.
7:00 Daily WAL 301.

The first third of the course MS. 521-522-523. Not open for credit to students who have taken MS. 420. Ordinary differential equations with emphasis on numerical methods and series solutions; the Laplace transform; boundary value problems; orthogonal functions. The methods of vector analysis and special topics of partial differential equations, and the functions of a complex variable with applications.

MS. 522.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 521 or MS. 420.
9:20 Daily WAL 202.

The middle third of MS. 521-522-523.

MS. 523.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 420, or 423, or MS. 521.
8:10 Daily WAL 202

The last third of MS. 521-522-523.

MS. 551.—Advanced Topics in Calculus. 3 credits.
9:20 Daily WAL 301

Topics of advanced nature selected from the calculus, including partial differentiation, Taylor's theorem, infinite series, continuation of simple multiple integrals, line and surface integrals, and Green's theorem.

MS. 561.—Introduction to Topology. 3 credits. Prerequisite: MS. 354.
8:10 Daily WAL 301

Set theory; the real line, topological spaces; topological notions; Heine-Borel Theorem; mappings, continuous functions and homeomorphisms; Hausdorff spaces; metric spaces; the Euclidean spaces.

GRADUATE COURSES

MS. 602.—Vector Analysis. 3 credits.
10:30 Daily WAL 102

The algebra and calculus of vectors in two and three dimensions. Applications to problems in physics and engineering.

MS. 613.—Theory of Groups of Finite Order. 3 credits.
7:00 Daily PEA 4

Introduction to the group concept; a treatment of pure group-theory with numerous examples and a few of the simpler applications.

MS. 624.—Synthetic Projective Geometry. 3 credits.
11:40 Daily WAL 307

Pure geometry, dealing primarily with properties unaltered by the processes of projection and section; principal theorems involved; theory of poles and polars; ruled surfaces of second order; the theory of involution.

MS. 630.—Individual Work. 3 credits.
To be arranged.

Under this number special work may be taken by graduate students.

MS. 636.—Foundation of Geometry. 3 credits.
9:20 Daily WAL 207

An investigation of the assumptions of geometry; the parallel postulate; steps leading to non-Euclidean geometries; consequent development of modern branches of the subject; elements of non-Euclidean geometry, trigonometry, and calculus.

MS. 640.—Fourier Series. 3 credits.
10:30 Daily WAL 308

The application of trigonometric series to the solution of boundary-value problems of mathematical physics. Solutions are obtained to partial differential equations relating to the flow of heat, conduction of electricity and vibrating strings.

MS. 668.—History of Elementary Mathematics. 3 credits.
10:30 Daily WAL 207

A survey of the development of mathematics through the calculus, with special emphasis on the changes of the processes of operation and methods of teaching. No specific textbook is followed, but a number of works are used as reference.

MS. 690.—Special Topics in Mathematics. 3 credits.
To be arranged.

Includes course work in topics not in sufficient demand to justify listing under separate numbering. Includes the following, and any other work needed in a doctoral program:

Abstract Analysis
Advanced Solid Analytic Geometry
Algebraic Topology
Analytic Number Theory
Banach Spaces and Algebras
Celestial Mechanics
Differential Geometry
Game Theory
Integral Equations
Life Insurance Mathematics
Linear Differential Equations
Metric Geometry
Numerical Analysis
Rings and Ideals
Theory of Finite Groups
Theory of Groupoids
Theory of Infinite Groups
Vector Spaces

Students desiring courses such as the above should discuss their needs with the Department as early as possible so that classes can be arranged as may seem desirable.

MS. 699.—Research and Master's Thesis. 0 to 6 credits.
To be arranged.

MS. 799.—Research and Doctoral Dissertation. 1-6 credits.
To be arranged.

MECHANICAL ENGINEERING

ML. 381.—Elementary Heat Power. 3 credits. Prerequisites: ML. 354, PS. 206.
8:10 Daily ENG 320

The fundamentals of steam power plants, internal combustion engines, and compressed air machinery.

ML. 384.—Metallography and Heat Treatment. 3 credits. Prerequisite: CG. 361.
8:10 M T Th F ENG 345
Laboratory: 12:50 to 4:10 T Th ENG 550

The crystal structure of ferrous and non-ferrous metals and their alloys; the iron-carbide diagram, heat treatment, and use of steel and cast iron.

ML. 385.—Thermodynamics I. 3 credits. Prerequisites: MS. 354, PS. 206, CY. 218.
10:30 Daily ENG 418

Energy equations and availability of energy; gases, vapors, and mixtures; engineering applications in flow of fluids, vapor power cycles.

ML. 387.—Mechanical Laboratory I. 1 credit. Corequisite: ML. 385.
12:50 to 5:30 M W WAL 103

The preparation of engineering reports, computation aids, the measurement of area, time, speed, pressure, temperature and gas flow.

ML. 489.—Manufacturing Operations I. 3 credits. Prerequisite: EM. 366. Corequisite: EM. 367.
(Register for the Lecture Section and One Laboratory Section)
Lecture Section 1: 10:30 M T W Th ENG 512
Laboratory Sections:
Section 11. 12:50 to 4:10 T Th F 103
Section 12. 12:50 to 4:10 M W F 103

Machinery, materials and processes used in manufacturing

ML. 491.—Machine Design I. 4 credits. Prerequisites: ML. 283, EM. 366, EM. 367.
9:20 Daily and 12:50 to 4:10 T Th ENG 501

Stress analysis of machine elements, design procedure, design of machine elements.

GRADUATE COURSES

ML. 683.—Mechanical Research I. Variable credit. Prerequisite: ML. 483-484.
To arrange.

Research projects in Mechanical Engineering.

ML. 689.—Advanced Mechanical Laboratory I. 3 credits. Prerequisite: ML. 483-484.
To arrange.

Experimental projects in Mechanical Engineering.

ML. 699.—Research and Master's Thesis. 0 to 6 credits.*

MEDICAL SCIENCES

MED. 615.—Introduction to Biochemical Research. 12 laboratory hours. 2 credits to 4 credits per semester. Prerequisite: MED 511 or by special arrangement.

An introduction to biochemical research in which the student acquires proficiency in one or more of the research techniques used in physical biochemistry, intermediary metabolism, radioisotopes, etc., under the direct supervision of one or more experienced staff members.

MED. 630.—Research in Medical Sciences: Anatomy, Biochemistry, Microbiology, Pathology, Pharmacology, Physiology. 0 to 6 credits.

Graduate students can obtain credit toward a degree for project research in any department listed. This work will supplement thesis research in the major department.

MED. 699.—Research and Master's Thesis. 0 to 6 credits.

MED. 799.—Research and Doctoral Dissertation. 1 to 6 credits.

MUSIC

***MSC. 21.—Piano.** 1 credit.
LAWRENSON, R. E.

***MSC. 25.—Voice.** 1 credit.
LUPKIEWICZ, J. V., STERRETT D. E.

***MSC. 27.—Stringed Instruments.** 1 credit.
WIRTALA, A. E.

***MSC. 35.—Woodwind Instruments.** 1 credit.
BOLLES, R. S.

***MSC. 43.—Brass Instruments.** 1 credit.
BACHMAN, H. B.

***MSC. 51.—Percussion Instruments.** 1 credit.
HALE, J. P.

All Applied Music Courses, except Organ, as outlined in the University of Florida General Catalogue will be offered during the Summer Session of 1958.

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*Credit assigned must be shown on course assignment card.

*Students registered for Applied Music will be assigned instructor, time and place of meeting at the registration desk.

MSC. 160.—Music Skills. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily R 201
Section 2. 11:40 Daily R 201

Fundamentals of music needed by the classroom teacher for teaching music in the elementary school.

MSC. 161.—Music for the Elementary Child. 3 credits. Prerequisite: MSC. 160 or equivalent.
9:20 Daily R 201 PAUL, O. F.

MSC. 161 is a state certification requirement for teaching in the elementary schools.
Principles, problems, and procedures relative to the teaching of music by the classroom teacher in the elementary school.

MSC. 170.—University Orchestry. 1 credit.
7:30 p.m. M, 4:20 Th R 144 WIRTALA, A. E.

Study and performance of standard orchestra literature.

MSC. 171.—Choral Union. 1 credit.
3:10 Daily R 122 STERRETT, D. E.

Study and performance of large choral works. A mixed chorus.

MSC. 174.—University Band. 1 credit.
4:20 M T W F R 144 BACHMAN, H. B.

Study and performance of standard band literature.

MSC. 210.—Music Appreciation. 2 credits.
10:30 M T Th F R 201 LUPKIEWICZ, J. V.

A study, through group listening and discussion, to expand the student's understanding of music literature.

MSC. 361.—Choral Materials Laboratory. 3 credits.
12:50 Daily R 201 PAUL, O. F.

The study and performance of the repertoire used in secondary school choral organizations.

MSC. 363.—Projects and Problems in Music. 3 credits.
To arrange R 208 WIRTALA, A. E.

For the advanced student who wishes some help in the problems of teaching music in an individual situation.

MSC. 364.—Projects and Problems in Music. 3 credits. The second half of course MSC. 363-364.
To arrange R 105 PAUL, O. F.

MSC. 413.—Survey of Music History. 2 credits. The second half of course MSC. 412-413.
2:00 M T Th F R 201 LUPKIEWICZ, J. V.

A detailed study of the history of music with emphasis on its relationship to the history of man.

MSC. 460.—Band Materials Laboratory. 3 credits.
9:20 Daily R 144 BACHMAN, H. B.

Study and performance of the repertoire used in school bands.

ORNAMENTAL HORTICULTURE

GRADUATE COURSES

OH. 611.—Advanced Greenhouse Management. 3 credits. Prerequisites OH. 441-442.
To arrange JOINER, J. N.

A detailed study of current literature and laboratory research of producing cut flowers, pot plants in greenhouses.

OH. 670.—Non-Thesis Research in Ornamental Horticulture. 1 to 6 credits.*

PHARMACEUTICAL CHEMISTRY

GRADUATE COURSES

PCY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

PCY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange.

PHARMACOGNOSY

PGY. 222.—Practical Pharmacognosy. 3 credits.
8:10 Daily LEI 432 JOHNSON, C. H.

GRADUATE COURSES

PGY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange

PGY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange

PHARMACOLOGY

PLY. 301.—Applied Human Anatomy for Pharmacists. 4 credits.
10:30 M T Th F LEI 432 MALEWITZ, T. D.
Lab. 2:00-5:20 M T W Th LEI 314

PLY. 405.—Introductory Pharmacology. 3 credits.
12:50 Daily LEI 432 FOX, L. E.

GRADUATE COURSES

PLY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

PLY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange.

PHARMACY

PHY. 106.—Pharmaceutical Calculations. 2 credits.
10:30 M T Th F LEI 324 BELTZ, L. D.

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*Credit assigned must be shown on course assignment card.

PHY. 224.—Galenical Pharmacy. 3 credits.
9:20 M T Th F LEI 324 BELTZ, L. D.
Lab. 9:20-12:40 W and 12:50 -4:10 F LEI 306

PHY. 456.—Pharmaceutical Specialties. 3 credits.
11:40 M T Th F LEI 324 LAUTER, W. M.
Lab. 9:20-11:30 W and 2:00-4:10 F LEI 314

PHY. 462.—Prescriptions and Dispensing. 4 credits.
(Register for the lecture and one laboratory section.)
Lecture Section 1: 8:10 M T Th F LEI 324 HUSA, W. J.
Laboratory Sections:
Section 11: 9:20-11:30 M T Th F LEI 306
Section 12: 2:00-4:10 M T W Th LEI 306

GRADUATE COURSES

PHY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange.

PHY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange.

PHILOSOPHY

PPY. 201.—Problems of Philosophy. 3 credits.
8:10 Daily AND 104 OLIVER, J. W.

A consideration of some of the major problems of philosophy—ethics, philosophy of science, theory of knowledge, philosophy of art, philosophy of religion and metaphysics. Selections from the writings of important philosophers, ancient and modern, with emphasis upon the modern, will be read.

PPY. 311.—History of Philosophy—Ancient and Medieval Periods. 3 credits.
9:20 Daily AND 104

History of philosophy from Greece to the Renaissance. Selections from the writings of the principal figures of this period will be read.

PPY. 430.—Individual Work. 3 credits. Prerequisite: 12 hours of philosophy, and permission of the departmental adviser.
To be arranged STAFF

Provision will be made for advanced undergraduate students who desire to supplement the regular courses by individual reading or investigation under guidance. Students will be helped to plan a definite program, and will meet a member or members of the departmental staff in frequent conferences. With change of content, PPY. 430 may be elected for full credit in subsequent sessions.

GRADUATE COURSES

PPY. 630.—Individual Work. 3 credits. Prerequisite: Approval of the departmental adviser.
To be arranged STAFF

Provision will be made for graduate students who desire to supplement the regular courses by individual reading or investigation under guidance. Students will be helped to plan a definite program, and will meet a member or members of the departmental staff in frequent conferences. With change of content, PPY. 630 may be elected for full credit in subsequent sessions.

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*Credit assigned must be shown on course assignment card.

PPY. 699.—Research and Master's Thesis. 0 to 6 credits.*
To be arranged.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 251.—Square and Social Dance. 2 credits.
2:00 Daily FLG 206 EDMONDSON, C.

Basic skills in square and social dancing.

PHA. 282.—Basketball, 2 credits.
9:20 Daily FLG 206 MCCACHREN, J.

Skills, rules, coaching methods, offensive and defensive team play in basketball.

PHA. 285.—Individual and Dual Sports for Men. 2 credits.
12:50 Daily FLG 206 POTTER, W. and MCCACHREN, J.

Skills, rules, strategies and teaching methods in tennis, handball, golf, and other individual and dual activities.

PHA. 286.—Aquatics. 2 credits.
8:10 Daily FLG 206 LEE, P.

Skills, knowledges and teaching methods in swimming and diving.

PHA. 324.—Social Recreation. 3 credits.
9:20 Daily FLG 224 MILLAR, J.

Methods, materials and techniques of conducting social recreation programs. Planning and participating in social activities for groups of varying sizes and for different situations. The activities include progressive parties, quiet and semi-active group games, stunts and contests, social mixers, outing events including hikes and picnics, and activities for special occasions, such as Thanksgiving, Halloween and Christmas.

PHA. 361.—Elementary School Health Program. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily FLG 208 HICKS, D.
Section 2. 9:20 Daily FLG 208 SOLLEY, W.
Section 3. 10:30 Daily FLG 208 SANDEFUR, W.

Principles of developing the health program with procedures for protecting and improving the health of the elementary school child through: home-school-community resources and cooperation; health screening and follow-up; use of school plant health services; selection and use of health instructional materials, records and reports in providing health experiences at various levels of the elementary school; integration and evaluation of health instruction.

PHA. 369.—School Safety Education. 2 credits.
10:30 M T W Th FLG 224 BENZ, W.

General safety content as applied in elementary and secondary school programs. Methods and materials for teaching safety, and the organization of safety education programs.

PHA. 373.—Teaching Physical Education in the Elementary School. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily FLG 222 PYE, R.
Section 2. 9:20 Daily FLG 222 PYE, R.
Section 3. 10:30 Daily FLG 222 HICKS, D.

The program of physical education activities for the elementary school including small group play, large group play, directed play, rhythmic activities and team games, together with methods and procedures for conducting such a program.

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*Credit assigned must be shown on course assignment card.

PHA. 375.—Adapted Physical Education. 3 credits.
11:40 Daily FLG 224 SCOTT, T. and BOYD, C.

The program of adapted physical education for the secondary schools; physiology of exercise and kinesiology as it applies to pupils with limited physical capacities.

PHA. 376.—First Aid and Injuries. 2 credits.
Prerequisite: Limited to Upper Division students.
11:40 M T W Th FLG 208 SOLLEY, W.

Standards and accepted principles of first aid. Dressings and bandages, wounds and their care, artificial respiration, poisons, fractures and dislocations, burns, transportation of the injured, and other common emergencies.

PHA. 421.—Driver Education and Traffic Safety. 3 credits. Prerequisite: Limited to Upper Division students who hold a valid driver's license.
8:10 Daily FLG 224 DAMRON, C. and BENZ, W.

Prepares teachers to conduct driver education and training courses on the secondary school level. Methods and materials concerned with the psychophysical limitations of drivers, driving practices, automobile construction, manipulation and maintenance, pedestrian protection, road training, and skill tests.

PHA. 510.—Evaluative Procedures in Physical Education and Health Education. 3 credits.
10:30 Daily FLG 309 DAMRON, C.

Graduate major credit. Basic concepts of measurement and evaluation as applied to the fields of physical education and health education. Status of evaluative procedures; problems of administering testing programs in the schools. Analysis of instruments and techniques used in measuring ability, capacity, and progress.

PHA. 512.—Physiological Bases of Physical Education. 3 credits.
8:10 Daily FLG 309 SANDEFUR, W.

Graduate major credit. The application of fundamental concepts of human physiology to the programs of physical education and sports. Emphasis is placed upon both acute and chronic physiologic effects and adjustments attending participation in physical activity. Consideration is given to major factors in diet, training and conditioning, physical fitness, fatigue, all-out performance, and physioloical characteristics of champion athletes. Status and recent developments in research in sports physiology is stressed throughout.

GRADUATE COURSES

PHA. 606.—Individual Work. 3 credits. Prerequisite: PHA. 605.
To arrange FLG 303 BOYD, C. and STAFF

For students who wish to pursue individual research projects under faculty guidance. Permission to register is dependent upon approval of a written statement of the proposed project by the project advisor and approval by the Dean.

PHA. 616.—The Physical Education Curriculum. 3 credits.
11:40 Daily FLG 309 LEAVITT, N.

Principles of developing an integrated physical education curriculum in grades 1-12. Included are the organization for and the methods of conducting curriculum studies. Practical experience is given in developing curriculum guides or courses of study.

PHA. 618.—The College Physical Education Program. 3 credits.
9:20 Daily FLG 309 STEVENS, B. K.

A study of the philosophy, program content, administration and methods of conducting the required, intramural and professional preparation programs of physical education in colleges and universities.

PHYSICS

PS. 201.—General Physics. 3 credits. The first half of the course PS. 201-202. Prerequisite: C-42.
(Register for the Demonstration Section, the Discussion Section, and for PS. 207.)
Demonstration Section 1: 11:40 F PHY AUD STAFF
Discussion Section 11: 7:00 Daily PHY 229 TELLER, M. H.

General Physics for science students.

PS. 202.—General Physics. 3 credits.
(Register for the Demonstration Section, the Discussion Section, and for PS. 208.)
Demonstration Section 1: 11:40 Th PHY AUD STAFF
Discussion Section 11: 8:10 Daily PHY 230 STAFF

PS. 205.—General Physics. 3 credits. The first half of the course PS. 205-206. Prerequisites: MS. 105-106. Corequisite: MS. 353.
(Register for the Demonstration Section, one Discussion Section, and for PS. 207.)
Demonstration Section 1: 11:40 F PHY AUD STAFF
Discussion Section 11: 8:10 Daily PHY 232 STAFF
Discussion Section 12: 9:20 Daily PHY 232 STAFF

Theory of Mechanics, heat, sound, electricity and light. Primarily for engineering students.

PS. 206.—General Physics. 3 credits. Corequisite: MS. 354.
(Register for the Demonstration Section, one Discussion Section, and for PS. 208.)
Demonstration Section 1: 11:40 Th PHY AUD STAFF
Discussion Section 11: 9:30 Daily PHY 239 STAFF
Discussion Section 12: 10:30 Daily PHY 239 STAFF

PS. 207.—Laboratory for PS. 201 and PS. 205. 1 credit.
(Register for one section only.)
Section 111: 12:50-3:50 M W PHY 324 TELLER, M. H.
Section 112: 12:50-3:50 M W PHY 325 TELLER, M. H.
Section 113: 12:50-3:50 T Th PHY 324 TELLER, M. H.
Section 114: 12:50-3:50 T Th PHY 325 TELLER, M. H.

PS. 208.—Laboratory for PS. 202 and PS. 206. 1 credit.
(Register for one section only.)
Section 111: 12:50-3:50 M W PHY 330 TELLER, M. H.
Section 112: 12:50-3:50 M W PHY 331 TELLER, M. H.
Section 113: 12:50-3:50 T Th PHY 330 TELLER, M. H.
Section 114: 12:50-3:50 T Th PHY 331 TELLER, M. H.

PS. 320.—Modern Physics. 3 credits. Prerequisite: 1 year college physics, 1 year calculus.
10:30 Daily PHY 229 SWANSON, D. C.

The discovery of the electron, X-rays, and radioactivity; the Bohr theory; photo-electric effect; X-rays and their applications; the nucleus; the neutron, the positron, the meson; high voltage production; nuclear reactions, and atomic energy.

GRADUATE COURSES

PS. 603.—Kinetic Theory of Gases and Statistical Mechanics. 3 credits.
10:30 Daily PHY 240 MEYER, A.

Kinetic theory, thermodynamics and statistical mechanics.

PS. 630.—Individual Work. Variable Credit.*
To arrange

Experiments on particular topics of physics, a review of classical experiments, or the development of an assigned experimental problem. The work will be assigned to meet the needs and interests of the particular student.

PS. 699.—Research and Master's Thesis. 0 to 6 credits.*

PS. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

PLANT PATHOLOGY

Prerequisites to any course in Plant Pathology are Botany 101 and 102. PT. 321 is prerequisite to courses in Plant Pathology except PT. 325, PT. 434, PT. 632, and PT. 634.

PT. 321.—Plant Pathology. 3 credits.
2:00 M W ROL 501 OWEN, J. H.
Laboratory: 3:10 to 5:20 M W and 2:00 to 4:10 T Th ROL 501.

Plant diseases caused by mechanical injury, environmental factors, faulty nutrition, viruses, nematodes, parasitic bacteria, fungi and other plants and their economic importance; life cycles and seasonal development of parasitic fungi and bacteria, and the phenomenon of parasitism; methods of control of plant disease.

PT. 421.—Fungicides. 3 credits.
7:00 M T W Th ROL 409 OWEN, J. H.
Laboratory: 7:00 to 11:30 F ROL 409

Fundamental composition, methods of preparation, manner of application and limits of safety of fungicidal sprays, dusts and gases in relation to disinfection and plant protection.

GRADUATE COURSES

Prerequisites: (1) PT. 321 or equivalent. (2) Thirty semester hours in biological sciences, 15 of which should be in botany.

PT. 605.—History of Plant Pathology. 1 credit.
To arrange ROL 409 MULLER, A. S.

A correlation of recorded historical events and the trends and development of plant pathology as an exploration of our current knowledge of plant diseases.

PT. 606.—Plant Pathology Literature. 1 credit.
To arrange ROL 409 MULLER, A. S.

The knowledge of existing and available source material, current technical publications dealing with plant diseases and their evaluation as aids in conducting research.

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*Credit assigned must be shown on course assignment card.

PT. 607.—Plant Disease Collection. 2 credits. Prerequisite: PT. 434.
To arrange ROL 409 MULLER, A. S.

The collection, identification and preservation of plant diseases and fungi, stressing those of economic importance in Florida and those possessing distinctive taxonomic characteristics.

PT. 699.—Research and Master's Thesis. 0 to 6 credits.*
ROL 408 OWEN, J. H.

For students working for the Master's degree. May be repeated for full credit but credits cannot be used to reduce the total required for the degree.

PT. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
ROL 408 OWEN, J. H.

For students studying for a Doctor's degree. May be repeated for full credit but credits cannot be used to reduce the total required for the degree.

POLITICAL SCIENCE

PCL. 201.—American Federal Government. 3 credits.
10:30 Daily PEA 201 DE GROVE, J. M.

Basic principles of the Federal Constitution. Civil Rights, Political parties and the electoral process. The structure and machinery of the federal government, including the Congress, President and Judiciary.

PCL. 202.—American State and Local Government. 3 credits.
9:20 Daily PEA 202 DOVELL, J. E.

State constitutions, political parties, and politics. State legislatures, courts, and chief executives. The functions of state governments. City and county governments.

PCL. 209.—International Relations. 3 credits. Prerequisite: C-1 or equivalent.
equivalent.
8:10 Daily PEA 202 KANTOR, H.

The nature of international relations; nationalism, imperialism, militarism, armaments; history of international relations; foreign policies; functions and problems of democracy; international organization; the United States.

PCL. 307.—Comparative Government. 3 credits. Prerequisite: 6 hours of Political Science.
9:20 Daily PEA 201 DIAMANT, A.

The government and politics of Great Britain and the Commonwealth of Nations. Special emphasis on historical, cultural, social, and economic determinants of current institutions and policies. Constitutions, parties, legislatures, executives, civil service systems, law, and local government.

PCL. 320.—Political Parties. 3 credits. Prerequisite: 6 hours in Political Science including PCL. 201.
1:40 Daily PEA 202 DE GROVE, J. M.

The composition of American political parties. The distinction between political parties and pressure groups; what groups compose our major parties and our minor parties; businessmen, farmers, white-collar employees, wage-earners, and racial and religious groups in politics; an analysis of party and pressure politics in all sections and states of the United States, with particular attention to the South and Florida.

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*Credit assigned must be shown on course assignment card.

PCL. 400.—Political Science for Teachers. 3 credits.
8:10 Daily PEA 201 DOVELL, J. E.

Special course for Graduate Students in College of Education. Designed for teachers who are in need of: (1) special topics, or (2) certain areas not covered in their general undergraduate work in the social sciences, or (3) additional work in certain fields. May be taken more than once when content is different.

PCL. 509.—American Foreign Policy. 3 credits. Prerequisite: PCL. 209-210 or HY. 245-246.
10:30 Daily PEA 202 SVARLIEN, O.

The United States in world affairs. Analysis of American foreign policy, past and present, in order to bring out the basic policies and the forces behind these policies.

GRADUATE COURSES

PCL. 630.—Individual Work. 3 credits.
Time, place to be arranged. STAFF.

A reading or research course in such areas of Political Science as are needed by the graduate students. May be elected for full credit in subsequent sessions with change of content.

PCL. 699.—Research and Master's Thesis. 0 to 6 credits.*
Thesis Instructor to be arranged.

PCL. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
Dissertation Instructor to be arranged.

POULTRY HUSBANDRY

GRADUATE COURSE

PY. 614.—Advanced Poultry Nutrition. 1 to 4 credits.*
To arrange HARMS, R. H.

Metabolism of essential nutrients, the role of enzymes and hormones in poultry nutrition.

PSYCHOLOGY

PSY. 201.—General Psychology. 3 credits.
9:20 Daily FLO 104

The general topics in the field of psychology. Designed to provide an understanding of human behavior, approached as a natural phenomenon subject to scientific study. The unifying concept is the adaptation of the individual to his physical and social environment.

PSY. 202.—Personality Development. 3 credits.
8:10 Daily FLO 104

The mechanisms of personality formation, with special emphasis upon the varieties of human adjustment. The more inevitable problems of human life with their normal and abnormal solutions The origin and modification of behavior. Processes of motivation and adjustment. Development of personality traits. Techniques of mental hygiene.

PSY. 205.—Social Psychology. 3 credits.
11:40 Daily FLO 104

Influence of the social environment upon the psychological development of the individual. The influence of the individual on social groups.

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*Credit assigned must be shown on course assignment card.

PSY. 308.—Developmental Psychology. 3 credits.
9:20 Daily E 102

An interpretation of research relating to the development of behavior. Consideration of human development is emphasized and augmented by the study of phylogenetic sequences.

PSY. 312.—Psychology of Exceptional Children. 3 credits.
10:30 Daily FLO 108

Individual differences, intelligence, feeble-mindedness, dull and backward children, superior and gifted children, speech and motor defects, sensory and neurological disorders, conduct problems, social and emotional maladjustments, and other topics concerning exceptional and mentally peculiar children.

PSY. 410.—Abnormal Psychology. 3 credits.
10:30 Daily FLO 104 WUNDERLICH, H.

The principal abnormal phases of behavior, and the ways by means of which the individual develops abnormal habits of thinking and acting. A survey of the signs of beginning maladjustment and procedures which may be followed to correct these tendencies. Special attention is given to the prevention and treatment of mental disease.

PSY. 421.—An Introduction to Learning. 3 credits.
8:10 Daily E 102

An introductory survey of the significant concepts, experimental methods, and principles of human learning and forgetting.

PSY. 430.—Individual Work. 3 credits.
To arrange STAFF

Qualified students and the instructor concerned may choose a particular problem for investigation or study from the various areas of experimental psychology. A formal written report of the work is required of the student.

PSY. 509.—Theories of Personality. 3 credits.
11:40 Daily E 102 DIXON, J. C.

Basic concepts and findings, techniques of investigation, and survey of contemporary theories of personality.

GRADUATE COURSES

PSY. 601.—Seminar: Literature in Experimental Psychology. 3 credits.
10:30 Daily LY 419 HORNE, E. P.

A consideration of experimental literature in selected areas of psychology.

PSY. 630.—Individual Work. 3 credits.
To arrange STAFF

A reading or research course in such areas of Psychology as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

PSY. 631.—Practice in Intelligence Testing. 3 credits.
8:10 Daily LY 419 BARRETT, A. M.

Extensive practice in the administration, scoring, and interpretation of individual intelligence tests.

PSY. 699.—Research and Master's Thesis. 0 to 6 credits.
To arrange STAFF

PSY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.
To arrange STAFF

REAL ESTATE

RE. 291.—Real Estate Fundamentals. 3 credits.
(Register for one section only)
Section 1. 8:10 Daily MAT 105 MC GOUGH, B. C.
Section 2. 9:20 Daily MAT 105 MC GOUGH, B. C.

A survey of the principles and practices essential to successful ownership of real property. The aim is to develop a full understanding of the significance of realty as a commodity and to equip the student with the fundamentals essential to successful real estate investment and enterprise. Classroom lectures and problems place emphasis on the legal, economic and technical aspects of real estate ownership and provide background training for those seeking specialization in the fields of real estate law, brokerage, management, appraising and real estate finance. Not open to students with 4BA classification.

RE. 295.—Housing and Home Ownership. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily MAT 102 KALKMAN, R. H.
Section 2. 10:30 Daily MAT 105 DEHNER, A. H.

Concerned with the consumption of real estate and the economic, legal and technical aspects of housing from the point of view of the home owner. Stress is laid on the evolution and limitations of property rights, the role of government in the field of housing, principles of home ownership, home construction and design, and the vital problem of when and how to buy a home. Not open to students with 4BA classification.

RE. 493.—Real Estate Law. 3 credits.
11:40 Daily MAT 102 DEHNER, A. H.

Necessity of learning when to consult a lawyer; fixtures: easements; land descriptions; land titles and interests; deeds; mortgages; foreclosures; landlord and tenant; taxes and assessments; avoidance of "unauthorized practice of law."

GRADUATE COURSES

RE. 699.—Research and Master's Thesis. 0 to 6 hours credit.*
To arrange.

Directed research and writing for the master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

REHABILITATION COUNSELING

RC. 641.—Psychological and Sociological Aspects of Rehabilitation Counseling. 3 credits.
9:20 Daily NRN 207 BARRETT, A. M.

Study of social and personal problems of the handicapped; psychological aspects of physical and mental disabilities; psychosomatic significance of certain major disabilities.

RC. 644.—Internship in Rehabilitation Counseling. 6 credits. Prerequisite: The basic courses in rehabilitation counseling and permission of instructor.
To arrange NRN 102 WEATHERFORD, S.

Supervised practice in counseling, case studies, contacts with community social agencies, as well as practicum in specific rehabilitation processes.

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*Credit assigned must be shown on course assignment card.

RELIGION

RN. 251.—Comparative Religion. 3 credits.
10:20 Daily I 204 SCUDDER, D. L.

RN. 342.—Career and Significance of Jesus. 3 credits.
9:20 Daily I 204 SCUDDER, D. L.

A study of the life of the historical Jesus based upon the comparative texts of the gospels.

RN. 430.—Individual Work. 3 credits. Prerequisite: 12 hours of Upper Division Humanities.

A tutorial program designed to assist the student in writing a comprehensive essay.

SCHOOL ART

SCA. 301.—Creative School Art. 3 credits.
2:00-4:10 M W F I 109 SCHRAEMEYER, C.

Study and practice in types of creative art work suitable for children of different age levels. Emphasis will be on painting.

SCA. 334.—School Art Design. 3 credits.
10:30-12:40 M W F I 109 SCHRAEMEYER, C.

To help teachers to understand design in art work of children; crafts and graphics.

SOCIAL STUDIES

SCL. 301.—Social Studies in the Elementary School. 3 credits.
Section 1. 9:20 Daily I 107 WEISS, W. D.
Section 2. 10:30 Daily I 107 WEISS, W. D.

Study of the selection, organization, planning, developing, and evaluating of experiences which help children become better citizens in a democracy. Exploration of the role of social studies and of other opportunities in the school curriculum for developing needed social learnings. Study of materials.

SCL. 302.—Social Studies in the Elementary School. 3 credits.
9:20 Daily I 101 TISON, J.

Examination of content in the social studies field needed for the instruction of elementary children. Relationship of content in the field to the objectives of the elementary school. Emphasis on problems of in-service teachers.

SOCIOLOGY

SY. 201.—Sociological Foundations of Modern Life. 3 credits. Prerequisite: C-11 or equivalent.
8:10 Daily PEA 308 WEBBER, I. L.

Culture and its relations to specific social problems. The social institutions of American life today in relation to population changes, ethnic groups, and major problems of social policy. The social consequences of technological change. Techniques of social control in the metropolitan world.

SY. 525.—Juvenile Delinquency. 3 credits. Prerequisite: 6 hours of sociology, including SY. 201.
7:00 Daily PEA 308 QUACKENBUSH, O. F.

Social determinants of delinquency. Methods of detention, probation and parole, court administration. Designed for teachers, social workers, and others concerned with the practical problems of delinquency.

SY. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of sociology, including SY. 201.
To arrange STAFF

Designed to permit advanced students to do work in subjects not available to them in currently offered courses.

SY. 546.—Criminology. 3 credits. Prequisite: SY. 201.
8:10 Daily PEA 309 QUACKENBUSH, O. F.

Nature and causes of crime. Punishment, treatment, prevention of criminality. Sociological aspects of criminal law and procedure. Emphasis on current trends in criminality and its treatment.

SY. 590.—The South Today. 3 credits. Prerequisite: 6 hours of Sociology, including SY. 201.
9:20 Daily PEA 309 MACLACHLAN, J. M.

Social resources and challenges in the modern Southeast. Variant patterns of southern culture. Population pressures and trends. The major problems of southern social institutions. Programs and plans for the region.

GRADUATE COURSES

SY. 630—Individual Work. 3 credits.
To arrange STAFF

Designed to permit graduate students to do work in subjects not available to them in currently offered courses.

SY. 654.—Seminar in Spanish American Cultures. 3 credits.
To arrange SMITH, T. L.

Intensive study of the peoples and cultures of Spanish American countries.

SY. 699.—Research and Master's Thesis. 0 to 6 credits.*

SY. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

For students who are working for a doctor's degree in the area of Inter-American Studies.

SOILS

SLS. 301.—Soils. 3 credits. Prerequisites: CY. 109-110 or CY. 121-122.
9:20 M T W Th MCC 133 EDSON, S. N.
Laboratory: 12:50 to 3:00 M MCC 123

The nature and properties of soils. A treatment of the fundamentals of soil science including genesis, morphology, classification, chemistry, biology, physics, and moisture as related to plant growth.

SLS. 302.—Soil Fertility. 3 credits. Prerequisite: SLS. 301.
11:40 M T W Th MCC 133 ROTHWELL, D. F.
Laboratory: 3:10 to 5:20 Th MCC 123

General principles of soil fertility. The physical, chemical and biological factors affecting soil fertility and crop production. Studies on samples of soil from the home farm; commercial fertilizers, manures, green manures and organic matter maintenance, crop rotation and permanent soil fertility.

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*Credit assigned must be shown on course assignment card.

SLS. 406.—Soils and Fertilizers. 3 credits. Prerequisite: SLS. 302.
8:10 M T W Th MCC 133 ROTHWELL, D. F.
Laboratory: 3:10 to 5:20 T MCC 23

The use of commercial fertilizers with reference to their effects on soils, methods of application and crop response. Manufacture and formulation of commercial fertilizers. Laboratory will include a visit to a fertilizer plant where the student will observe commercial practices in mixing and handling.

GRADUATE COURSES

SLS. 600.—Advanced Soils. 3 credits. Prerequisites: SLS. 302 and permission of instructor.
To arrange MCC 220

Conferences, lectures, laboratory and problems in Soil Fertility and Management, Soil Chemistry and Microbiology, Soil Physics and Surveying and General Soils.

SLS. 670.—Research in Soils. 1 to 6 credits.*
To arrange. MCC 220

SLS. 699.—Research and Master's Thesis. 0 to 6 credits.*

SLS. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*

SPANISH

SH. 133.—First-Year Spanish. 3 credits.
7:00 M T W Th AND 4 MORRISON, R. R.
Laboratory: 10:30 Daily AND 11

SH. 134.—First-Year Spanish. 3 credits. Prerequisite: SH. 133 or the equivalent.
10:30 M T W Th AND 6 MORRISON, R. R.
Laboratory: 11:40 Daily AND 11

SH. 201.—Second-Year Spanish. 3 credits. Prerequisite: SH. 134 or the equivalent.
8:10 M T W Th AND 18 HAYES, F. C.
Laboratory: 10:30 Daily AND 11

SH. 202.—Second-Year Spanish. 3 credits. Prerequisite: SH. 201 or the equivalent.
9:20 M T W Th AND 18 FERNANDEZ, P. V.
Laboratory: 11:40 Daily AND 11

SH. 430.—Individual Work. 3 credits.
To arrange AND 3-B STAFF

GRADUATE COURSES

SH. 630.—Individual Work. 3 credits.
To arrange AND 3-B STAFF

SH. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange AND 3-B STAFF

SH. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange AND 3-B STAFF

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*Credit assigned must be shown on course assignment card.

SPEECH

SCH. 100.—Parliamentary Procedure. 1 credit.
11:40 T Th ADM 239

Rules governing the proceedings of deliberative assemblies together with practice in their usage.

SCH. 200.—Voice and Diction. 2 credits.
12:50 M T W Th ADM 239 ZIMMERMAN, L. L.

Effective voice production, clear articulation, acceptable pronunciation, and pleasing intonation; rhythm and phrasing. Both group and individual improvement needs are met.

SCH. 201.—Effective Speaking. 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily ADM 239 KIRK, J. W.
Section 2. 9:20 Daily ADM 239 CONSTANS, H. P.
Section 3. 10:30 Daily ADM 239 MC CLELLAN, M.

Designed to aid the student through demonstration and practice to speak effectively to a group.

SCH. 307.—Interpretation of Literature. 3 credits. Prerequisite: or corequisite: SCH. 201.
9:20 Daily ADM 239 KIRK, J. W.

Exercises for developing the effectiveness of the body and voice; oral reading of short stories and narrative poetry.

SCH. 317.—Correction of Speech Defects. 3 credits. Prerequisite: SCH. 201.
10:30 Daily ADM 331 TEW, ROY E.

A beginning course in the recognition of common defects of articulation, dialect, nasality. Observation in the clinic.

SCH. 320.—Speech Training in Elementary Schools. 3 credits. Prerequisite: SCH. 201 or experience as an elementary teacher.
8:10 Daily ADM 331 MC CLELLAN, M.

Group procedures for the development of desirable speech habits in the child. Recognition of speech disorders.

SCH. 519.—Speech and Hearing. 3 credits. Prerequisite: SCH. 415
11:40 Daily ADM 331 TEW, ROY E.

A study of the relationship between speech and hearing, the frequency of hearing losses and speech defects, the speech therapies for the hearing handicapped; elementary audiometry.

GRADUATE COURSES

SCH. 602.—Plays, Players, and Playwrights. 3 credits.
2:00 Daily ADM 239 ZIMMERMAN, L. L.

A study of recent plays primarity from the point of view of production; the techniques of outstanding actors and playwrights.

SCH. 609.—Contemporary Rhetoric. 3 credits.
12:50 Daily ADM 332 EHNINGER, DOUGLAS

A survey of certain major trends in contemporary rhetorical thought, with special reference to their sources and pedagogical implications.

SCH. 621.—Clinical Practice. 3 credits.
2:00 to 4:10 Daily ADM 331 STAFF

Supervised practice in clinical teaching, application of clinical methods in diagnosis, and retraining of individuals having disorders of speech. Preparation and study of case histories.

SCH. 630.—Individual Work. 3 credits.

A project or research course in such areas of Speech as are needed by graduate students. May be elected in subsequent sessions with change of content.

SCH. 699.—Research and Master's Thesis. 0 to 6 credits.

SCH. 799.—Research and Doctoral Dissertation. 1 to 6 credits.

VEGETABLE CROPS

VC. 499.—Special Problems in Vegetable Crops. 1 to 3 credits.*
To arrange JAMISON, F. S.

GRADUATE COURSES

VC. 670.—Non-thesis Research in Vegetable Crops. 1 to 6 credits.*
To arrange JAMISON, F. S.

VC. 699.—Research and Master's Thesis. 0 to 6 credits.*
To arrange JAMISON, F. S.

VC. 799.—Research and Doctoral Dissertation. 1 to 6 credits.*
To arrange JAMISON, F. S.

*Credit assigned must be shown on course assignment card.

VETERINARY SCIENCE

VY. 545.—Problems in Animal Parasitology. 4 to 8 credits.* Approved for Graduate credit. Prerequisites: BLY. 161, 162, 208, 209, and BCY. 300.
To arrange.

GRADUATE COURSE

VY. 643.—Problems in Animal Pathology. 4 to 8 credits.* Prerequisite: Consult major professor.
To arrange.

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*Credit assigned must be shown on course assignment card.